

## WEST Search History

[Hide Items](#) [Restore](#) [Clear](#) [Cancel](#)

DATE: Friday, July 22, 2005

[Hide?](#) [Set Name](#) [Query](#)

[Hit Count](#)

*DB=USPT; PLUR=YES; OP=OR*

<input type="checkbox"/>	L8	capping same membrane same \$\$accharid\$	19
<input type="checkbox"/>	L7	capping same (\$antibod? or adhes?) same \$\$accharid\$	4
<input type="checkbox"/>	L6	capping same (\$antibod? or adhes?) same membrane	20
<input type="checkbox"/>	L5	cap? same (antibod? or adhes?) same membran?	58

*DB=PGPB,USPT; PLUR=YES; OP=OR*

<input type="checkbox"/>	L4	cap? same (antibod? or adhes?) same membran?	107
<input type="checkbox"/>	L3	2004013720.pn.	0
<input type="checkbox"/>	L2	differ\$ with head with epitope	10
<input type="checkbox"/>	L1	bilayer same ((conjugate or conjugated) WITH head)	17

END OF SEARCH HISTORY

## WEST Search History

[Hide Items](#) [Restore](#) [Clear](#) [Cancel](#)

DATE: Friday, July 22, 2005

<u>Hide?</u>	<u>Set Name Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L2 differ\$ with head with epitope	10
<input type="checkbox"/>	L1 bilayer same ((conjugate or conjugated) WITH head)	17

END OF SEARCH HISTORY

l 20  
27, 32  
421 44 WO 48 56 44  
01 01140 50  
l 151 1-4-01  
1, 9, 10, 11, 13  
14, 15, 17,  
18, 19, 25  
27, 28, 29, 30, 31, 36  
loc at 2004 013720  
WO 0236073  
prior to  
601245, 140

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005

=> fil medline biosis capplus embase wpids  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
FULL ESTIMATED COST ENTRY SESSION  
0.21 0.21

FILE 'MEDLINE' ENTERED AT 15:58:37 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 15:58:37 ON 22 JUL 2005  
Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 15:58:37 ON 22 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 15:58:37 ON 22 JUL 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

```
=> head (s) different (s) epitope
L1          10 HEAD (S) DIFFERENT (S) EPITOPE
```

```
=> head (s) differ? (s) epitope
L2          16 HEAD (S) DIFFER? (S) EPITOPE
```

```
=> dup rem 12
PROCESSING COMPLETED FOR L2
L3          12 DUP REM L2 (4 DUPLICATES REMOVED)
```

=> t ti 13 1-12

L3 ANSWER 1 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New bispecific antibodies that bind two different targets, useful for diagnosing, preventing or treating diseases such as a hyperproliferative (e.g. cancer), cardiovascular, neurodegenerative, metabolic or an autoimmune disease.

L3 ANSWER 2 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Detecting a cancer cell in a subject sample, also related to cancer treatments, comprises determining the level of nucleic acid that is linked to map position 8q22.3 of the human genome or its expression product.

L3 ANSWER 3 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New purified thrombospondin fragment extracted from a body fluid, useful  
for diagnosing cancer e.g. adenoma, adenocarcinoma, carcinoma, lymphoma or  
leukemia or as calibrators, indicators, immunogens and analytes.

- L3 ANSWER 4 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Selecting an antibody from a phage display library using sequential antigen panning, useful for treating or reducing infections, such as bacterial, virus and parasitic infection, and for inhibiting cancers.
- L3 ANSWER 5 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Diagnosing and/or treating cancer, such as brain, lymphatic, liver, stomach, testicular, cervical, endometrial, renal, lung and ovarian cancers, leukemia and melanoma, comprises using soluble MIC polypeptides as markers.
- L3 ANSWER 6 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Preventing, treating or managing cancer in a patient comprises administering to the patient VITAXIN or an antibody or its fragment that competes with VITAXIN for binding to Integrin alphavbeta3 and one or more other cancer therapies.
- L3 ANSWER 7 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.
- L3 ANSWER 8 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New Major Histocompatibility Complex (MHC) molecule construct, useful for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells e.g., cancer.
- L3 ANSWER 9 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.
- L3 ANSWER 10 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Inducing human immunodeficiency virus-specific helper T-cell responses.
- L3 ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 1  
TI Plakophilin, armadillo repeats, and nuclear localization.
- L3 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 2  
TI Differential localization of two epitopes of Escherichia coli ribosomal protein L2 on the large ribosomal subunit by immune electron microscopy using monoclonal antibodies.

=> d ibib abs 13 9

L3 ANSWER 9 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-102938 [11] WPIDS  
DOC. NO. NON-CPI: N2001-076388  
DOC. NO. CPI: C2001-030197  
TITLE: Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.  
DERWENT CLASS: B04 S03  
INVENTOR(S): NEW, R; TOTH, I  
PATENT ASSIGNEE(S): (PROX-N) PROXIMA CONCEPTS LTD; (MOZA-N) MOZAICO DISCOVERY LTD; (MOZA-N) MOZAIC DISCOVERY LTD; (PROV-N) PROVALIS UK LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
-----	-----	-----	-----	-----

WO 2001001140 A1 20010104 (200111)\* EN 39  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TZ UG ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ  
 EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
 LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
 SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 AU 2000056923 A 20010131 (200124)  
 BR 2000012002 A 20020312 (200226)  
 EP 1190255 A1 20020327 (200229) EN  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI  
 CN 1359469 A 20020717 (200268)  
 KR 2002042537 A 20020605 (200277)  
 JP 2003503424 W 20030128 (200309) 29  
 AU 775310 B2 20040729 (200472)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001001140	A1	WO 2000-GB2465	20000627
AU 2000056923	A	AU 2000-56923	20000627
BR 2000012002	A	BR 2000-12002	20000627
		WO 2000-GB2465	20000627
EP 1190255	A1	EP 2000-942216	20000627
		WO 2000-GB2465	20000627
CN 1359469	A	CN 2000-809653	20000627
KR 2002042537	A	KR 2001-716715	20011227
JP 2003503424	W	WO 2000-GB2465	20000627
		JP 2001-507094	20000627
AU 775310	B2	AU 2000-56923	20000627

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000056923	A Based on	WO 2001001140
BR 2000012002	A Based on	WO 2001001140
EP 1190255	A1 Based on	WO 2001001140
JP 2003503424	W Based on	WO 2001001140
AU 775310	B2 Previous Publ. Based on	AU 2000056923 WO 2001001140

PRIORITY APPLN. INFO: GB 1999-15074 19990628

AN 2001-102938 [11] WPIDS

AB WO 2001001140 A UPAB: 20010224

NOVELTY - Epitopes are formed by non-covalent association of conjugates, and assemblies composed of combinations of different head groups can elicit biological responses or participate in binding with biological receptors that assemblies of single head groups cannot.

DETAILED DESCRIPTION - A composition for interacting with a ligand comprises a non-covalent association of **different** conjugates, each conjugate comprising a **head** group and a tail group, where the tail groups form a hydrophobic aggregation and the conjugates are movable within the association so that, in the presence of a ligand, at least 2 of the **head** groups are appropriately positioned to form an **epitope** capable of interacting with the ligand more strongly than each of the **head** groups individually. An INDEPENDENT CLAIM is included for the following:

- (a) preparation of the composition; and
- (b) a method for producing a molecule for interacting with a ligand,

comprising producing a composition as above; identifying the head groups which form an epitope for the ligand; and producing a molecule incorporating the functional groups of the head groups, optionally spaced apart by 1 or more linker groups so that the molecule is capable of interacting with the ligand more strongly than each of the head groups individually.

USE - The compositions are useful in therapeutic, prophylactic or diagnostic methods.

ADVANTAGE - Strong specific binding interactions can be achieved with conjugates in which the head groups are small compared to conventional biological receptors, e.g. if the head group is an oligo-peptide, then the length of the peptide chain would be at most 10 (preferably at most 6) amino acids, and compositions can be made less immunogenic than their protein counterparts.

Dwg.0/2

=> d ibib abs 13 1-8, 10-12

L3 ANSWER 1 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2005-091969 [10] WPIDS  
DOC. NO. CPI: C2005-031094  
TITLE: New bispecific antibodies that bind two different targets, useful for diagnosing, preventing or treating diseases such as a hyperproliferative (e.g. cancer), cardiovascular, neurodegenerative, metabolic or an autoimmune disease.  
DERWENT CLASS: B04 D16  
INVENTOR(S): HANSEN, H J; MCBRIDE, W J; QU, Z  
PATENT ASSIGNEE(S): (IMMU-N) IMMUNOMEDICS INC  
COUNTRY COUNT: 108  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2005004809	A2	20050120 (200510)*	EN	163	
RW:	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
US 2005100543	A1	20050512 (200532)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005004809	A2	WO 2004-US20995	20040701
US 2005100543	A1 Provisional	US 2003-483832P	20030701
		US 2004-882151	20040701

PRIORITY APPLN. INFO: US 2003-483832P 20030701; US  
2004-882151 20040701

AN 2005-091969 [10] WPIDS

AB WO2005004809 A UPAB: 20050211

NOVELTY - A bispecific antibody comprising the structure (IgG1)-(scFv)<sub>2</sub>, is new. The antibody comprises a pair of heavy chains and a pair of light chains, where each heavy chain comprises an IgG1 heavy chain and an scFv, where the scFv is fused to the C-terminus of the IgG1 heavy chain,

optionally via a linker peptide.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a binding complex comprising a tetravalent binding molecule bound to a targetable construct, where the tetravalent binding molecule comprises 2 binding sites for a carrier epitope and 2 binding sites for a target epitope, and where the targetable construct comprises a molecular scaffold and at least 2 carrier epitopes;

(2) treating a disease in a subject;

(3) diagnosing/detecting a disease in a subject;

(4) a kit comprising a tetravalent binding molecule comprising 2 binding sites for a carrier epitope and 2 binding sites for a target epitope; optionally, a clearing agent; and a targetable construct comprising a molecular scaffold and at least 2 carrier epitopes; and

(5) a pharmaceutical composition comprising the bispecific antibody cited above.

ACTIVITY - Cytostatic; Cardiovascular-Gen.; Neuroprotective; Endocrine-Gen.; Immunosuppressive.

No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The composition and methods are useful for diagnosing, preventing or treating diseases such as a hyperproliferative disease, pathogenic disease, cancer, cardiovascular disease, neurodegenerative disease, metabolic disease, or autoimmune disease.

Dwg.0/8

L3 ANSWER 2 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2004-248472 [23] WPIDS  
CROSS REFERENCE: 2004-315574 [29]  
DOC. NO. NON-CPI: N2004-197115  
DOC. NO. CPI: C2004-097127  
TITLE: Detecting a cancer cell in a subject sample, also related to cancer treatments, comprises determining the level of nucleic acid that is linked to map position 8q22.3 of the human genome or its expression product.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): CLANCY, J; HENDERSON, M; HENSHALL, S; O'BRIEN, P; SAUNDERS, D; SUTHERLAND, R; WATTS, C; OBRIEN, P  
PATENT ASSIGNEE(S): (GARV-N) GARVAN INST MEDICAL RES  
COUNTRY COUNT: 106  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004022750	A1	20040318	(200423)*	EN	331
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
AU 2003257275	A1	20040329	(200459)		
EP 1539957	A1	20050615	(200539)	EN	
R:	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004022750	A1	WO 2003-AU1164	20030905
AU 2003257275	A1	AU 2003-257275	20030905

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003257275	A1 Based on	WO 2004022750
EP 1539957	A1 Based on	WO 2004022750

PRIORITY APPLN. INFO: US 2002-425218P 20021107; AU 2002-951346 20020905

AN 2004-248472 [23] WPIDS

CR 2004-315574 [29]

AB WO2004022750 A UPAB: 20050621

NOVELTY - Detecting a cancer cell in a subject comprises determining the level of nucleic acid (Edd) that is linked to map position 8q22.3 of the human genome or its expression product in a sample of the subject, where an elevated level of the nucleic acid or polypeptide is indicative of cancer in the subject.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a method for diagnosing a cancer or predicting recurrence of a cancer in a subject comprising determining the level of mRNA or protein encoded by nucleic acid as cited above;

(2) the isolated nucleic acid molecule for detecting cancer cell;  
 (3) an isolated or recombinant protein complex;  
 (4) an antibody that binds to the protein complex;  
 (5) a kit for detecting or producing a protein complex, comprising an EDD polypeptide or a portion of an EDD polypeptide and a second polypeptides selected from a protein having tumor suppressor activity, a protein having cell cycle modulatory activity, a protein associated with DNA repair or damage, a nuclear targeting protein, and a progesterone receptor protein or its portion, where the portion of the second polypeptide is sufficient to bind to the EDD polypeptide or the portion of an EDD polypeptide;

(6) methods for isolating the protein complex;  
 (7) a method for determining a predisposition for disease, or disease state;

(8) a method for determining a modulator of the activity, formation or stability of an isolated or recombinant protein complex;

(9) a method for determining a modulator of the level of protein complex formation;

(10) a method for treating a condition associated with elevated expression of EDD protein in a cell;

(11) an antisense nucleic acid, ribozyme, PNA, interfering RNA or siRNA; and

(12) a pharmaceutical composition comprising the antisense nucleic acid, ribozyme, PNA, interfering RNA or siRNA.

ACTIVITY - Cytostatic. No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The methods and modulator are useful for treating a condition associated with EDD over expression such as cancer, e.g. squamous cell carcinoma, hepatocellular carcinoma, ovarian cancer, breast cancer, melanoma, head and neck cancer, adenocarcinoma, squamous lung cancer, gastrointestinal cancer (e.g. gastric, colon, or pancreatic cancer), renal cell cancer, bladder cancer, prostate cancer, non-squamous carcinoma, glioblastoma and medulloblastoma. The components and composition are useful for reducing the expression of EDD in a cell to inhibit cellular proliferation (all claimed).

L3 ANSWER 3 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-226901 [21] WPIDS  
 DOC. NO. CPI: C2004-089523  
 TITLE: New purified thrombospondin fragment extracted from a body fluid, useful for diagnosing cancer e.g. adenoma, adenocarcinoma, carcinoma, lymphoma or leukemia or as calibrators, indicators, immunogens and analytes.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): WILLIAMS, K J  
 PATENT ASSIGNEE(S): (WILL-I) WILLIAMS K J  
 COUNTRY COUNT: 105  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004018995	A2	20040304 (200421)*	EN	76	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
US 2004053392	A1	20040318 (200421)			
AU 2003262727	A1	20040311 (200457)			
US 2005065324	A1	20050324 (200526)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004018995	A2	WO 2003-US26023	20030820
US 2004053392	A1 Provisional	US 2002-405494P	20020823
		US 2003-419462	20030421
AU 2003262727	A1	AU 2003-262727	20030820
US 2005065324	A1 Provisional	US 2002-405494P	20020823
	CIP of	US 2003-419462	20030421
		US 2004-782968	20040220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003262727	A1 Based on	WO 2004018995

PRIORITY APPLN. INFO: US 2003-419462 20030421; US  
 2002-405494P 20020823

AN 2004-226901 [21] WPIDS

AB WO2004018995 A UPAB: 20040326

NOVELTY - A purified thrombospondin fragment that has been extracted from a bodily fluid, where the fragment is within a molecular weight range selected from 80-10 kDa, 40-60 kDa or 20-35 kDa, and where the size in kDa is determined by gel electrophoresis after disulfide bond reduction, is new.

DETAILED DESCRIPTION - A thrombospondin fragment or its portion comprising:

- (a) one that starts between amino acyl residues N-230 and G-253 inclusive and ends between amino acyl residues V-400 and S-428;
- (b) one that starts between amino acyl residues N-230 and G-253, inclusive and ends between amino acyl residues D-527 and S-551;
- (c) one that starts between amino acyl residues N-230 and G-253, inclusive and ends between amino acyl residues G-787 and V-811;

(d) one that starts between amino acyl residues I-165 and V-263, inclusive and ends between amino acyl residues K-412 and 1-530;

(e) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues 1-530 and R-733;

(f) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues R-733 and Y-982;

(g) one that starts between amino acyl residues I-165 and V-263, inclusive, and ends between amino acyl residues K-412 and 1-530;

(h) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues 1-530 and R-733;

(i) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues R-792 and Y-982.

The thrombospondin fragment comprises at least 4-6 contiguous amino acyl residues from the thrombospondin sequence, where the amino acid sequence of the fragment is limited to one that is outside of a thrombospondin region given above.

INDEPENDENT CLAIMS are also included for:

(1) a molecule identical in primary structure to the compound above;

(2) a method to detect and/or quantify a thrombospondin fragment;

(3) a method of producing antibodies against a thrombospondin fragment comprising administering the fragment to an organism capable of producing antibodies;

(4) a monoclonal or polyclonal antibody produced by the method of (3);

(5) a cell line producing the monoclonal antibodies or the binding agent;

(6) a method of producing a peptide or non-peptide binding agent against a thrombospondin fragment;

(7) a kit for the determination of the presence of, and/or the amount of, and/or the concentration of, a thrombospondin fragment in a material taken or gathered from an organism comprising the thrombospondin fragment, a binding agent that will react with thrombospondin but not with the fragment or fragments of interest or an antibody that will react with thrombospondin fragments of interest but not with thrombospondin;

(8) a method comprising determining the amount of the unlabeled or differently labeled fragment through comparison to the results obtained from the unlabeled or differently labeled fragment;

(9) a method to detect the presence and/or clinical course of a neoplastic disease in an individual; and

(10) a method of producing a binding agent against a thrombospondin fragment comprising binding a phage to the thrombospondin fragment.

USE - The thrombospondin fragments are useful in diagnostic methods for cancer, as method calibrators, method indicators, as immunogens and as analytes for methods with sustained clinical utility. Cancer is selected from adenoma, adenocarcinoma, carcinoma, lymphoma, leukemia, solid cancer, liquid cancer, metastatic cancer, pre-metastatic cancer, non-metastatic cancer, a cancer with vascular invasion, internal cancer, skin cancer, cancer of the respiratory system, cancer of the circulatory system, cancer of the musculoskeletal system, cancer of a muscle, cancer of a bone, cancer of a joint, cancer of a tendon or ligament, cancer of the digestive system, cancer of the liver or biliary system, cancer of the pancreas, cancer of the head, cancer of the neck, cancer of the endocrine system, cancer of the reproductive system, cancer of the male reproductive system, cancer of the female reproductive system, cancer of the genitourinary system, cancer of a kidney, cancer of the urinary tract, cancer of a sensory system, cancer of the nervous system, cancer of a lymphoid organ, blood cancer, cancer of a gland, cancer of a mammary gland, cancer of a prostate gland, cancer of an endometrial tissue, cancer of a mesodermal tissue, cancer of an ectodermal tissue, cancer of an endodermal tissue, a teratoma, a poorly-differentiated cancer, a well-differentiated cancer, and a moderately differentiated cancer.

L3 ANSWER 4 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-011801 [01] WPIDS  
 DOC. NO. CPI: C2004-003469  
 TITLE: Selecting an antibody from a phage display library using sequential antigen panning, useful for treating or reducing infections, such as bacterial, virus and parasitic infection, and for inhibiting cancers.  
 DERVENT CLASS: B04 D16  
 INVENTOR(S): DIMITROV, D S; ZHANG, M  
 PATENT ASSIGNEE(S): (USSH) US DEPT HEALTH & HUMAN SERVICES; (DIMI-I) DIMITROV D S; (ZHAN-I) ZHANG M  
 COUNTRY COUNT: 103  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003092630	A2	20031113 (200401)*	EN	78	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
AU 2003237187	A1	20031117 (200442)			
US 2005123900	A1	20050609 (200541)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003092630	A2	WO 2003-US14292	20030506
AU 2003237187	A1	AU 2003-237187	20030506
US 2005123900	A1 Provisional	US 2002-378408P WO 2003-US14292 US 2005-513725	20020506 20030506 20050125

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003237187	A1 Based on	WO 2003092630

PRIORITY APPLN. INFO: US 2002-378408P 20020506; US  
2005-513725 20050125

AN 2004-011801 [01] WPIDS

AB WO2003092630 A UPAB: 20040102

NOVELTY - Selecting an antibody comprising selecting an antibody from a phage display library using sequential antigen panning, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a sequential antigen panning method for selecting an antibody from a phage display library, comprising selecting phage from a phage display library using a first selecting condition, where the first selecting condition is an antigen at a known concentration, and selecting phage from the phage selected using a second selecting condition that differs from the first selecting conditions, with the proviso that this step can be repeated any number of times, each time using a different selecting conditions;

(2) a composition produced using any of the methods;  
(3) a composition comprising a neutralizing antibody that recognizes

more than one strain of a pathogen;

(4) an antibody to HIV envelope glycoprotein that can recognize one or more strains of HIV, comprising a 233, 228, 231, 237, 214, 210, 212 or 212 amino acid sequence (SEQ ID NO: 1-8), given in the specification, or their variants that retains the ability to bind to the same epitope to a greater or lesser extent;

(5) a fusion protein or conjugate comprising the antibody of (4);

(6) a composition comprising the antibody of (4), where the toxin is *Pseudomonas* toxin;

(7) an isolated or purified nucleic acid molecule comprising a sequence encoding amino acid sequence with SEQ ID NO: 1-6, or its variant that retains the ability to bind to the same epitope to a greater or lesser extent;

(8) a vector comprising the isolated or purified nucleic acid of (7);

(9) a composition comprising the isolated or purified nucleic acid molecule of (7), optionally in the form of a vector;

(10) a host cell comprising the isolated or purified nucleic acid molecule of (7), optionally in the form of a vector;

(11) treating, inhibiting or reducing the severity of an infection in an animal, comprising administering an infection-inhibiting amount of a composition comprising an antibody produced by the method, optionally in the form of a fusion protein, where the antibody or fusion protein is optionally encoded in an isolated or purified nucleic acid molecule, which is optionally in the form of a vector and/or optionally contained within a cell, where the infection in the animal is inhibited; and

(12) inhibiting cancer in a mammal, comprising administering an cancer-inhibiting amount of a composition comprising an antibody produced by the method, optionally in the form of a fusion protein, where the antibody or fusion protein is optionally encoded in an isolated or purified nucleic acid molecule, which is optionally in the form of a vector and/or optionally contained within a cell, where the cancer in the animal is inhibited.

ACTIVITY - Antibacterial; Virucide; Antiparasitic; Protozoacide; Fungicide; Cytostatic.

No biological data given.

MECHANISM OF ACTION - Gene-Therapy.

USE - The methods and compositions of the present invention are useful for treating, inhibiting or reducing the severity of an infection, such as bacterial, virus and parasitic infection, and for inhibiting cancers.

Dwg.0/5

L3 ANSWER 5 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-854115 [79] WPIDS  
DOC. NO. CPI: C2003-241002  
TITLE: Diagnosing and/or treating cancer, such as brain,  
lymphatic, liver, stomach, testicular, cervical,  
endometrial, renal, lung and ovarian cancers, leukemia  
and melanoma, comprises using soluble MIC polypeptides as  
markers.  
DERWENT CLASS: B04 D16  
INVENTOR(S): SPIES, T; SPIES, V  
PATENT ASSIGNEE(S): (HUTC-N) HUTCHINSON CANCER RES CENT FRED  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2003089616	A2 20031030 (200379)*	EN	98	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS				
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK				

DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL  
PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU  
ZA ZM ZW

AU 2003225093 A1 20031103 (200438)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003089616	A2	WO 2003-US12299	20030422
AU 2003225093	A1	AU 2003-225093	20030422

FILING DETAILS:

PATENT NO	KIND	PATENT NO
-----	-----	-----
AU 2003225093	A1 Based on	WO 2003089616

PRIORITY APPLN. INFO: US 2002-374442P 20020422

AN 2003-854115 [79] WPIDS

AB WO2003089616 A UPAB: 20031208

NOVELTY - Assaying for cancer in a subject comprises obtaining at least a first sample from a subject suspected of having or being at risk for developing cancer, and assaying for a soluble MIC polypeptide in the sample, where identification of a soluble MIC polypeptide in the sample indicates cancer.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) assaying for cancer in a subject, comprising obtaining a sample from a subject suspected of having or being at risk for developing cancer, assaying for a soluble MIC polypeptide in the sample comprising contacting a sample from the subject with a first antibody attached to a solid support, wherein the first antibody binds to a soluble MIC polypeptide in the sample, and incubating the sample with a second antibody, wherein the second antibody binds to the soluble MIC polypeptide, wherein identification of a soluble MIC polypeptide in the sample indicates cancer;

(2) treating cancer, comprising detecting cancer in a subject by obtaining a sample from the subject and assaying for a soluble MIC polypeptide in the sample, and administering to the subject chemotherapy, radiation therapy, gene therapy, or hormone therapy;

(3) diagnosing or prognosing an autoimmune disease or condition in a patient, comprising identifying a patient suspected of having an autoimmune disease or condition, and assaying for a soluble MIC polypeptide in a sample from the patient, wherein identification of a soluble MIC polypeptide in the sample indicates an autoimmune disease or condition;

(4) kit for diagnosing or prognosing cancer or an autoimmune disease in a patient, comprising, in suitable container means an agent that specifically recognizes all or part of a MIC polypeptide or a nucleic acid encoding a MIC polypeptide, and a positive control that can be used to determine whether the agent is capable of specifically recognizing all or part of a MIC polypeptide or a nucleic acid encoding a MIC polypeptide;

(5) screening for candidate therapeutic agents for an autoimmune disease, comprising contacting a MIC polypeptide with an NKG2D receptor polypeptide in the presence and absence of a candidate substance, assaying for binding between the MIC polypeptide and the NKG2D receptor in its presence and absence, wherein a reduction of binding in its presence compared to its absence is indicative of a candidate therapeutic agent for an autoimmune disease; and

(6) assaying a candidate therapeutic agent for efficacy against an

autoimmune disease, comprising contacting a MIC polypeptide with an NKG2D receptor polypeptide in the presence and absence of the candidate substance, wherein the candidate substance is substantially pure, assaying for binding between the MIC polypeptide and the NKG2D receptor in its presence and absence, wherein a reduction of binding in its presence compared to its absence indicates the candidate substance has the ability to reduce binding between the MIC polypeptide and the NKG2D receptor.

ACTIVITY - Cytostatic; Immunosuppressive; Endocrine-Gen.; Anabolic; Hypertensive; Antipsoriatic; Antirheumatic; Antiarthritic; Antiinflammatory; Dermatological.

No biological data given.

MECHANISM OF ACTION - MIC-Modulator; Gene-Therapy.

No biological data given.

USE - The methods and compositions of the present invention are useful for diagnosing, prognosticating and/or treating cancer, such as brain cancer, lymphatic cancer, liver cancer, stomach cancer, testicular cancer, cervical cancer, ovarian cancer, leukemia, melanoma, head and neck cancer, esophageal cancer, colon cancer, breast cancer, lung cancer, prostate cancer, and renal cancer, and autoimmune diseases such as alopecia, Addison's disease, psoriasis, rheumatoid arthritis and systemic lupus erythematosus.

Dwg.0/2

L3 ANSWER 6 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-748337 [70] WPIDS  
CROSS REFERENCE: 2003-748311 [70]; 2004-604159 [58]  
DOC. NO. NON-CPI: N2003-599814  
DOC. NO. CPI: C2003-205213  
TITLE: Preventing, treating or managing cancer in a patient comprises administering to the patient VITAXIN or an antibody or its fragment that competes with VITAXIN for binding to Integrin alphavbeta3 and one or more other cancer therapies.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): DORMITZER, M; HEINRICHHS, J; KIENER, P; WALSH, W;  
WOESSNER, R  
PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE INC  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003075957	A1	20030918	(200370)*	EN	155
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
US 2004001835	A1	20040101	(200402)		
AU 2003217930	A1	20030922	(200431)		
EP 1487492	A1	20041222	(200501)	EN	
R:	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003075957	A1	WO 2003-US6684	20030304
US 2004001835	A1 Provisional	US 2002-361859P	20020304

		Provisional	US 2002-370398P	20020405
		Provisional	US 2003-444265P	20030130
			US 2003-379189	20030304
AU 2003217930	A1		AU 2003-217930	20030304
EP 1487492	A1		EP 2003-713905	20030304
			WO 2003-US6684	20030304

**FILING DETAILS:**

PATENT NO	KIND	PATENT NO
AU 2003217930	A1 Based on	WO 2003075957
EP 1487492	A1 Based on	WO 2003075957

PRIORITY APPLN. INFO: US 2003-444265P 20030130; US  
2002-361859P 20020304; US  
2002-370398P 20020405; US  
2003-379189 20030304

AN 2003-748337 [70] WPIDS  
CR 2003-748311 [70]; 2004-604159 [58]  
AB WO2003075957 A UPAB: 20050103

NOVELTY - Preventing, treating or managing cancer in a patient, comprises administering to the patient VITAXIN (RTM) or its antigen-binding fragment, or an antibody or its fragment that competes with VITAXIN (RTM) for binding to Integrin alpha v beta 3 and a dose of one or more other cancer therapies.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a pharmaceutical composition;
  - (2) a method of screening for antibodies with specific binding affinity for the epitope specifically recognized by VITAXIN; and
  - (3) a method for detecting Integrin alpha v beta 3 in tissue.

ACTIVITY - Cytostatic; Fungicide; Antiparasitic; Antimicrobial; Antiinflammatory; Virucide. No biological data given.

#### MECHANISM OF ACTION - Gene therapy; Vaccine.

USE - The method is useful for preventing, treating or managing cancer in a patient (claimed).

Dwg. 9/7

ANSWER 7 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

POWER  
SESSION NINE

L3 ANSWER 7 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-167365 [16] WPIDS  
DOC. NO. CPI: C2003-043494  
TITLE: Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.  
DERWENT CLASS: B04 C06 D16  
INVENTOR(S): BARGATZE, R F; CUTLER, J E; GLEE, P M; HAN, Y; JUTILA, J W; NAGY, J O; PASCUAL, D  
PATENT ASSIGNEE(S): (BARG-I) BARGATZE R F; (CUTL-I) CUTLER J E; (GLEE-I) GLEE P M; (HANY-I) HAN Y; (JUTI-I) JUTILA J W; (NAGY-I) NAGY J O; (PASC-I) PASCUAL D; (LIGO-N) LIGOCYTE PHARM INC; (UYMO-N) UNIV MONTANA STATE-BOZEMAN

### COUNTRY COUNT:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002100325	A2	20021219 (200316)*	EN	56	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ				
	NL OA PT SD SE SL SZ TR TZ UG ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK				

DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO  
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 US 2003223938 A1 20031204 (200380)  
 AU 2001297913 A1 20021223 (200452)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002100325	A2	WO 2001-US42712	20011015
US 2003223938	A1 Provisional Cont of	US 2000-239874P WO 2001-US42712 US 2003-412685	20001013 20011015 20030414
AU 2001297913	A1	AU 2001-297913	20011015

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001297913	A1 Based on	WO 2002100325

PRIORITY APPLN. INFO: US 2000-239874P 20001013; US  
 2003-412685 20030414

AN 2003-167365 [16] WPIDS

AB WO2002100325 A UPAB: 20030307

NOVELTY - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

DETAILED DESCRIPTION - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target under physiologically relevant shear conditions, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

INDEPENDENT CLAIMS are also included for the following:

(1) a therapeutic formulation (II) in unit dose form comprising (I), to modulate a specific interaction between a cell or toxin and its receptor on a target in a host, where L1 is derived from or mimics a ligand on the cell or toxin;

(2) a vaccine (III) comprising (I), where L1 is an epitope that is derived from a pathogen, pathogen-derived toxin or tumor cell, and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell;

(3) a diagnostic imaging agent comprising (I), and further comprising a contrast agent detectable by medical resonance imaging or other visualization techniques;

(4) a delivery vehicle (IV) comprising (I), and an agent to be delivered to the target;

(5) optimizing (V) a nanoparticle displaying polyvalent binding units having L1 and L2, comprises optimizing the amount of L1 on the nanoparticle under physiologically relevant shear conditions and holding the optimized amount of L1 constant, optimizing the amount of L2 under physiologically relevant shear conditions;

(6) a nanoparticle library (VI) comprising multiple polymer beads, where each bead contains several nanoparticles associated with the surface of the polymer bead, where all of the nanoparticles associated with any one bead display the same polyvalent binding unit;

(7) a vaccine comprising (I), and a polynucleotide sequence that encodes an epitope found on a pathogen or a tumor cell and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell; and

(8) a nanoparticle produced by (VI).

ACTIVITY - Antibacterial; Fungicide; Virucide; Protozoacide; Anti-HIV; Immunostimulant; Antiinflammatory; Cytostatic.

MECHANISM OF ACTION - Vaccine; Inhibitor of lymphocyte attachment in Peyer's patch.

A variation on the Peyer's patch method was used to examine the P-selectin-mediated adhesion in a mouse mesentery venule model. A lateral incision was made into the abdominal wall to allow the small intestine to be externalized. The intestine was positioned for microscopic examination of the mesentery. A solution of PMA in phosphate buffered saline was superfused directly onto the mesentery to allow for upregulation of P-selectin in the endothelium of the mesentery venules. The area of the incision was treated and cannulation of the tail vein was performed. A variable dose of carbohydrate- and sulfate-displaying nanoparticle was administered. The results showed the reduction in number of leukocyte rolling and sticking events compared to the untreated control, and the increase in cell velocity relative to the untreated control. At the highest dosage tested (2.3 mg/kg of carbohydrate), there was a greater than 65% reduction in the number of rolling/sticking leukocytes and a nearly 90% increase in the rolling velocity, over the control.

USE - (I) is useful for sequestration of toxins in the bloodstream of a host, by administering (I) to bind a circulating toxin or toxic metabolic product, where the first ligand is derived from or mimics a receptor that specifically binds to the toxin or toxic metabolic product. The binding is effective to produce an effect such as decreased inflammation, decreased systemic toxicity, chelation therapy, neutralization of pathogens, inhibition of metastasis, inhibition of drug intoxication, tissue regeneration, selective cellular differentiation and proliferation. (I) is also useful in a diagnostic method by allowing (I) to bind to a toxin or pathogen or an antibody against such toxins or pathogens and then detecting nanoparticles bound to such toxins, pathogen or antibodies. (III) is formulated to elicit a protective immune response against a pathogen such as *Escherichia coli*, *Candida albicans*, *Brucella* sp., *Salmonella* sp., *Shigella* sp., *Pseudomonas* sp., *Bordetella* sp., *Clostridium* sp., group B strep, *E.coli* 0157, Norwalk virus, anthrax, human immunodeficiency virus (HIV), sexually transmitted diseases (STDs), *Chlamydia*, hepatitis B virus (HBV), malaria, cell wall proteins of *Candida* sp., and GB3 toxin from *E.coli* 0157. (IV) is useful for delivering an agent such as therapeutic or cytotoxic agent to a target. (VI) is useful for screening agents, by adding at least one candidate agent to the nanoparticle library, and detecting binding of the agent to any one or more polymer beads in the library. The candidate agent comprises a detectable label and acts as a reporter to L1. Vaccine construct comprising (I) is useful for delivering nanoparticle therapeutic molecules to an animal (all claimed).

The polymerized nanoparticle constructs and assemblies are useful as modulators, inhibitors and enhancers and drug delivery agents for a variety of interactions as well as their down-stream effects, such as pathogen-cell attachment, pathogen-derived-toxin-cell attachment, cell-cell attachment mediated diseases, integrin adhesions, complement fixation and chemokine-mediated events. The nanoparticles are readily used as synthetic vaccines.

Dwg.0/6

L3 ANSWER 8 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-759837 [82] WPIDS

DOC. NO. CPI: C2002-214753

TITLE: New Major Histocompatibility Complex (MHC) molecule

construct, useful for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells e.g., cancer.

DERWENT CLASS:

B04 D16

INVENTOR(S):

AMELLEM, O; BUUS, S; PETERSEN, L O; RUUD, E; SCHOLLER, J; WINTHER, L; AAMELLEM, O; RUUB, E; SCHOELLER, J

PATENT ASSIGNEE(S):

(DAKO-N) DAKO AS; (DYNA-N) DYNAL BIOTECH ASA; (DAKO-N) DAKOCYTOMATION DENMARK AS

COUNTRY COUNT:

101

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002072631	A2	20020919 (200282)*	EN	304	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW				
NO 2003004020	A	20031106 (200380)			
EP 1377609	A2	20040107 (200404)	EN		
R:	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR				
AU 2002240818	A1	20020924 (200433)			
JP 2005500257	W	20050106 (200505)		439	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002072631	A2	WO 2002-DK169	20020313
NO 2003004020	A	WO 2002-DK169	20020313
		NO 2003-4020	20030911
EP 1377609	A2	EP 2002-706685	20020313
		WO 2002-DK169	20020313
AU 2002240818	A1	AU 2002-240818	20020313
JP 2005500257	W	JP 2002-571544	20020313
		WO 2002-DK169	20020313

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1377609	A2 Based on	WO 2002072631
AU 2002240818	A1 Based on	WO 2002072631
JP 2005500257	W Based on	WO 2002072631

PRIORITY APPLN. INFO: US 2001-275470P 20010314; DK  
2001-435 20010314; DK  
2001-436 20010314; DK  
2001-441 20010314; US  
2001-275447P 20010314; US  
2001-275448P 20010314

AN 2002-759837 [82] WPIDS

AB WO 200272631 A UPAB: 20021220

NOVELTY - A new Major Histocompatibility Complex (MHC) molecule construct comprising a carrier molecule to which one or more MHC molecules are attached either directly or via one or more entities, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) detecting the presence or MHC recognizing cells in a sample;
- (2) monitoring MHC recognizing cells;
- (3) establishing a prognosis of a disease involving MHC recognizing cells;
- (4) determining the status of, or the effectiveness of a medicament against, a disease involving MHC recognizing cells;
- (5) diagnosing a disease involving MHC recognizing cells;
- (6) a therapeutic composition comprising as active ingredient a MHC molecule construct;
- (7) up-regulating, down-regulating or modulating an immune response in an animal, including a human being;
- (8) treating an animal, including a human being;
- (9) inducing energy of a cell in animal, including a human being;
- (10) an adoptive cellular immunotherapeutic method;
- (11) obtaining MHC recognizing cells; or
- (12) producing a therapeutic composition.

ACTIVITY - Cytostatic; Antiinflammatory; Dermatological; Antiasthmatic; Antidiabetic; Anti-HIV; Virucide; Antiarteriosclerotic; Antiulcer; Antirheumatic; Antiarthritic; Antipsoriatic; Immunosuppressive. No biological data is given.

MECHANISM OF ACTION - Gene therapy.

USE - The MHC molecule construct is useful as a therapeutic composition in in vivo or ex vivo therapy, for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells, for monitoring MHC recognizing cells or establishing a prognosis of a disease or diagnosing a disease, or determining the status of a disease or the effectiveness of a medicament against a disease, involving MHC recognizing cells, e.g., chronic inflammatory bowel disease such as Crohn's disease or ulcerative colitis, sclerosis, type I diabetes, rheumatoid arthritis, psoriasis, atopic dermatitis, asthma, malignant melanoma, renal carcinoma, breast cancer, lung cancer, cancer of the uterus, cervical cancer, prostate cancer, brain cancer, head and neck cancer, leukemia, cutaneous lymphoma, hepatic carcinoma, colorectal cancer, bladder cancer, rejection-related disease, Graft-versus-host-related disease, or a viral disease associated with hepatitis, Acquired Immunodeficiency Syndrome (AIDS), measles, pox, chicken pox, rubella or herpes. The MHC molecule construct is also useful for flow cytometric, histological or cytological method (all claimed.)

Dwg.0/57

L3 ANSWER 10 OF 12 WPIIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 1999-610208 [52] WPIIDS  
 DOC. NO. CPI: C1999-177599  
 TITLE: Inducing human immunodeficiency virus-specific helper T-cell responses.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): WALKER, B D  
 PATENT ASSIGNEE(S): (GEHO) GEN HOSPITAL CORP  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5972339	A	19991026 (199952)*		25	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5972339	A	US 1997-969721	19971113

PRIORITY APPLN. INFO: US 1997-969721

19971113

AN 1999-610208 [52] WPIDS

AB US 5972339 A UPAB: 19991210

NOVELTY - A method (X) for producing human immunodeficiency virus (HIV)-specific helper T-cell responses in animals using helper T-cell epitopes of peptides 112, 117, 118, 120, 121, 122, 125 and/or 127, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(i) a method (X) for producing a human immunodeficiency virus (HIV)-specific helper T-cell response in an animal, comprising:

(1) providing a polypeptide 8 to 50 amino acid residues in length comprising a helper T-cell epitope of the HIV capsid (which produces a stimulation index more than 10 in CD4+ cells in a subject chronically infected with HIV); and

(2) administering the polypeptide to produce a HIV-specific helper T-cell response; and

(ii) a composition (Y) comprising:

(1) a polypeptide 8 to 50 amino acid residues in length, comprising a helper T-cell epitope of peptide 112, 117, 118, 120, 121, 122, 125 and/or 127 (which have defined amino acid sequences ((I) -(VIII)) given in the specification); and

(2) an adjuvant.

ACTIVITY - Anti-HIV.

MECHANISM OF ACTION - Vaccine.

USE - (X) may be used for inducing HIV-specific helper T-cell responses in animals (preferably humans), especially those already chronically infected with HIV (i.e. inducing immunity by vaccination).

Dwg.0/5

L3 ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 1999220994 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10206153  
TITLE: Plakophilin, armadillo repeats, and nuclear localization.  
AUTHOR: Klymkowsky M W  
CORPORATE SOURCE: Molecular, Cellular and Developmental Biology, University of Colorado, Boulder 80309-0347, USA..  
klym@spot.colorado.edu  
CONTRACT NUMBER: GM54001 (NIGMS)  
SOURCE: Microscopy research and technique, (1999 Apr 1) 45 (1)  
43-54.  
Journal code: 9203012. ISSN: 1059-910X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199907  
ENTRY DATE: Entered STN: 19990816  
Last Updated on STN: 19990816  
Entered Medline: 19990730

AB Plakophilins are armadillo-repeat containing proteins, identified through their localization to desmosomes. Expressed in a wide range of tissues, plakophilins are largely nuclear in most cell types [Schmidt et al. (1997) Cell Tissue Res 290:481; Mertens et al. (1996) J. Cell Biol 135:1009]. Using Xenopus embryos and cultured A6 cells, together with myc- and green fluorescent protein (GFP)-tags, we found that both the N-terminal, non-armadillo repeat "head" and the C-terminal armadillo repeat-containing regions can enter nuclei. The "arm" repeat domain is predominantly cytoplasmic and concentrated at the cell cortex, whereas the head and full-length polypeptides are concentrated in the nucleus. The head domain can also be seen to decorate and disrupt keratin filament network organization in some cells. In the course of these studies, we found that the distribution of the myc-**epitope** and green fluorescence

**differed** in fixed cells, e.g., while the green fluorescence of a myc- and GFP-tagged **head** domain polypeptide was usually exclusively nuclear, a substantial fraction of the myc-immunoreactivity was cytoplasmic. Treating cells with the translation inhibitor cycloheximide reduces the cytoplasmic myc-signal, suggesting that it represented nascent polypeptides awaiting folding and nuclear import. Based on these types of experiments, GFP can be seen as a marker of the distribution of the mature form of the tagged polypeptide.

L3 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 91107695 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 1703157  
TITLE: Differential localization of two epitopes of Escherichia coli ribosomal protein L2 on the large ribosomal subunit by immune electron microscopy using monoclonal antibodies.  
AUTHOR: Olson H M; Nag B; Etchison J R; Traut R R; Glitz D G  
CORPORATE SOURCE: Department of Biological Chemistry and Molecular Biology Institute, UCLA School of Medicine, University of California 90024.  
CONTRACT NUMBER: GM 17924 (NIGMS)  
GM 32769 (NIGMS)  
SOURCE: Journal of biological chemistry, (1991 Jan 25) 266 (3) 1898-902.  
Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199102  
ENTRY DATE: Entered STN: 19910329  
Last Updated on STN: 19980206  
Entered Medline: 19910227  
AB Two monoclonal antibodies (mAb), directed toward **different** epitopes of Escherichia coli ribosomal protein L2, have been used as probes in immune electron microscopy. mAb 5-186 recognizes an **epitope** within residues 5-186 of protein L2; it is seen to bind to 50 S subunits at or near the peptidyl transferase center, beside the subunit **head** on the L1 shoulder. mAb 187-272 recognizes an **epitope** within residues 187-272. This antibody binds to the face of the 50 S subunit, below the head and slightly toward the side with the stalk; this site is near the translocation domain. Both antibodies can bind simultaneously to single subunits. This indicates that protein L2 is elongated, reaching from the peptidyl transferase center to below the subunit head and approaching the translocational domain. The different locations of the two epitopes are consistent with previous biochemical results with the two antibodies (Nag, B., Tewari, D. S., Etchison, J. R., Sommer, A., and Traut, R. R. (1986) J. Biol. Chemical 261, 13892-13897).

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1 10 HEAD (S) DIFFERENT (S) EPITOPE  
L2 16 HEAD (S) DIFFER? (S) EPITOPE  
L3 12 DUP REM L2 (4 DUPLICATES REMOVED)

=> head (s) differ? (s) (ligand or receptor)  
L4 288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)

=> (head (s) differ? (s) (ligand or receptor)) and tail  
L5 26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL

=> dup rem 15  
PROCESSING COMPLETED FOR L5  
L6 15 DUP REM L5 (11 DUPLICATES REMOVED)

=> t ti 16 1-15

L6 ANSWER 1 OF 15 MEDLINE on STN DUPLICATE 1  
TI Membrane-proximal {alpha}/{beta} stalk interactions differentially regulate integrin activation.

L6 ANSWER 2 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Determining whether treatment of a disorder with histone deacetylase inhibitors is to be started/continued or not, using antibody capable of binding to acetylated histone but not to deacetylated histone.

L6 ANSWER 3 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.

L6 ANSWER 4 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.

L6 ANSWER 5 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Detecting heterogeneous nucleic acid sequences in organisms and cells, useful for detecting and identifying genetically modified organisms or their products.

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation and electrochemical behavior of dinuclear platinum complexes containing NCN ligands (NCN = [C6H3(Me2NCH2)2-2,6]-). The crystal structure of [C6H3(Me2NCH2)2-1,3-(C.tplbond.C)-5]2

L6 ANSWER 7 OF 15 MEDLINE on STN DUPLICATE 2  
TI The influence of stereoisomerism on the pharmacokinetics of Tc radiopharmaceuticals.

L6 ANSWER 8 OF 15 MEDLINE on STN DUPLICATE 3  
TI Selective targeting of human cells by a chimeric adenovirus vector containing a modified fiber protein.

L6 ANSWER 9 OF 15 MEDLINE on STN DUPLICATE 4  
TI Ligand recruitment by vinculin domains in transfected cells.

L6 ANSWER 10 OF 15 MEDLINE on STN DUPLICATE 5  
TI Synthesis and biological evaluation of a new reversely linked type of dual histamine H2 and gastrin receptor antagonist.

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and Characterization of Poly(benzoyl-1,4-phenylene)s. 2. Catalyst Coligand Effects on Polymer Properties

L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Cytosine nucleobase as a tridentate ligand: metal binding to N(3), N(4) and O(2) in trans-[(NH2Me)2Pt(dmcyt)2Ag2][NO3]2 (dmcyt = 1,5-dimethylcytosinate)

L6 ANSWER 13 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI CHARACTERIZATION OF 5-HT RECEPTOR SUBTYPES INVOLVED IN THE MOTOR BEHAVIORS PRODUCED BY INTRATHECAL ADMINISTRATION OF 5-HT AGONISTS IN RATS.

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI X-ray crystal structure and homonuclear phosphorus-31-phosphorus-31 σ/J-resolved NMR spectroscopic studies of tetrakis (1,8-diisocyanomethane)bis(triphenylphosphine)dilridium silver(3+) tris(hexafluorophosphate). Observation of a statistical mixture of "head/tail" isomers

L6 ANSWER 15 OF 15 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI The regional distribution of a morphine like factor enkephalin in monkey brain.

=> d ibib abs 16 1-3, 5

L6 ANSWER 1 OF 15 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2005329024 IN-PROCESS  
DOCUMENT NUMBER: PubMed ID: 15863495  
TITLE: Membrane-proximal {alpha}/{beta} stalk interactions differentially regulate integrin activation.  
AUTHOR: Kamata Tetsuji; Handa Makoto; Sato Yukiko; Ikeda Yasuo; Aiso Sadakazu  
CORPORATE SOURCE: Departments of Anatomy, Transfusion Medicine and Cell Therapy, and Internal Medicine, Keio University School of Medicine, Tokyo 160-8582, Japan.. kamata@sc.itc.keio.ac.jp  
SOURCE: Journal of biological chemistry, (2005 Jul 1) 280 (26) 24775-83. Electronic Publication: 2005-04-29. Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals  
ENTRY DATE: Entered STN: 20050628  
Last Updated on STN: 20050715

AB The affinity of integrin-ligand interaction is regulated extracellularly by divalent cations and intracellularly by inside-out signaling. We report here that the extracellular, membrane-proximal alpha/beta stalk interactions not only regulate cation-induced integrin activation but also play critical roles in propagating inside-out signaling. Two closely related integrins, alphaIIbβ3 and αVβ3, share high structural homology and bind to similar ligands in an RGD-dependent manner. Despite these structural and functional similarities, they exhibit distinct responses to Mn(2+). Although αVβ3 showed robust ligand binding in the presence of Mn(2+), αIIbβ3 showed a limited increase but failed to achieve full activation. Swapping α stalk regions between αIIb and αV revealed that the α stalk, but not the **ligand**-binding **head** region, was responsible for the **difference**. A series of αIIb/αV domain-swapping chimeras were constructed to identify the responsible domain. Surprisingly, the minimum component required to render αIIbβ3 susceptible to Mn(2+) activation was the αV calf-2 domain, which does not contain any divalent cation-binding sites. The calf-2 domain makes interface with β epidermal growth factor 4 and β **tail** domain in three-dimensional structure. The effect of calf-2 domain swapping was partially reproduced by mutating the specific amino acid residues in the calf-2/epidermal growth factor 4-β **tail** domain interface. When this interface was constrained by an artificially introduced disulfide bridge, the

Mn(2+)-induced alphaVbeta3-fibrinogen interaction was significantly impaired. Notably, a similar disulfide bridge completely abrogated fibrinogen binding to alphaIIb beta3 when alphaIIb beta3 was activated by cytoplasmic **tail** truncation to mimic inside-out signaling. Thus, disruption/formation of the membrane-proximal alpha/beta stalk interface may act as an on/off switch that triggers integrin-mediated bidirectional signaling.

L6 ANSWER 2 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-271984 [26] WPIDS  
 DOC. NO. NON-CPI: N2004-215240  
 DOC. NO. CPI: C2004-105664  
 TITLE: Determining whether treatment of a disorder with histone deacetylase inhibitors is to be started/continued or not, using antibody capable of binding to acetylated histone but not to deacetylated histone.  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): ARECES, L B; FARETTA, M; MACCARANA, M; MINUCCI, S; PELICCI, P G; PICCINI, D; RONZONI, S  
 PATENT ASSIGNEE(S): (GTWO-N) G2M CANCER DRUGS AG  
 COUNTRY COUNT: 107  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1403639	A1	20040331 (200426)*	EN	36	
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
WO 2004029622	A2	20040408 (200426)	EN		
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
AU 2003271663	A1	20040419 (200462)			
EP 1546712	A2	20050629 (200543)	EN		
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1403639	A1	EP 2002-21984	20020930
WO 2004029622	A2	WO 2003-EP10842	20030930
AU 2003271663	A1	AU 2003-271663	20030930
EP 1546712	A2	EP 2003-753482	20030930
		WO 2003-EP10842	20030930

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003271663	A1 Based on	WO 2004029622
EP 1546712	A2 Based on	WO 2004029622

PRIORITY APPLN. INFO: EP 2002-21984 20020930  
 AN 2004-271984 [26] WPIDS  
 AB EP 1403639 A UPAB: 20040421  
 NOVELTY - Determining (M1) whether treatment of disorder with histone

deacetylase (HDAC) inhibitor is to be started/continued/not by contacting sample from tissue affected by disorder with antibody binding to acetylated histone but not to deacetylated histone, determining histone level acetylation in sample and classifying disorder as to be treated with HDAC inhibitor when histone acetylation level is significantly less than control sample.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) use of an antibody capable of binding to acetylated histone for determining whether a treatment of a disorder with an HDAC inhibitor is to be started/continued or not, and/or the classification of tumors;

(2) an antibody (I) capable of binding to peptides having a sequence of Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Ala-Lys- Arg (histone H4 **tail**, mono-acetylated at lysine 8) (S1) and Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Gly-Ala-Lys- Arg (histone H4 **tail**, mono-acetylated at lysine 12) (S2) but not to anyone of the peptides having the sequences of Ser-Gly-Arg-Gly-Lys-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Ala-Lys- Arg (histone H4 **tail**, mono-acetylated at lysine 16) (S3), Ser-Gly-Arg-Gly-Lys-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Ala-Lys- Arg (non-acetylated peptide) (S4), Ala-Val-Cys-Asp-Lys-Cys-Leu-Lys-Phe-Tyr-Ser-Lys and Val-Trp-Asp-Gln-Glu-Phe-Leu-Lys-Val-Asp-Gln-Gly;

(3) an antibody (II) capable of binding to peptides having (S1), (S2) and (S3) but not to peptides having (S4);

(4) an antibody produced by a hybridoma cell line chosen from hybridoma cell lines G2M-T25-H4ac and G2M-T52-ac deposited at DSMZ;

(5) a hybridoma cell line producing (I) or (II);

(6) a hybridoma cell line which has the identifying characteristics of the cell line G2M-T25-H4ac deposited at DSMZ;

(7) a hybridoma cell line which has the identifying characteristics of the cell line G2M-T52-ac deposited at DSMZ;

(8) a diagnostic kit (III) for determining the level of histone acetylation containing an antibody capable of binding to acetylated histone but not to deacetylated histone, an HDAC inhibitor, and optionally, a secondary antibody directed against the antibody, and optionally reagents for the measurement of a signal derived from an antibody binding to acetylated histones; and

(9) use of the antibodies T25 and/or T52 (IV) to direct substances conjugated to these antibodies to sites of histone hyperacetylation.

USE - (M1) is useful for determining whether a treatment of a disorder with an HDAC inhibitor is to be started/continued or not. The disorder is chosen from diseases in which the induction of hyperacetylation of histones has a beneficial effect resulting in **differentiation** and/or apoptosis of a patient's tumor cells, diseases that show aberrant recruitment of HDAC activity, conditions associated with abnormal gene expression, autoimmune diseases, and proliferative diseases such as skin cancer, melanoma, estrogen **receptor**-dependent and independent breast cancer, ovarian cancer, testosterone **receptor**-dependent and independent prostate cancer, renal cancer, colon and colorectal cancer, pancreatic cancer, bladder cancer, esophageal cancer, stomach cancer, genitourinary cancer, gastrointestinal cancer, uterine cancer, astrocytomas, gliomas, basal cancer and squamous cell carcinoma, sarcomas as Kaposi's sarcoma and osteosarcoma, **head** and neck cancer, small cell and non-small cell lung carcinoma, leukemia, lymphomas and other blood cell cancers or thyroid resistance syndrome (claimed).

Dwg.0/11

L6 ANSWER 3 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-167365 [16] WPIDS

DOC. NO. CPI: C2003-043494

TITLE: Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where

ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.  
 DERWENT CLASS: B04 C06 D16  
 INVENTOR(S): BARGATZE, R F; CUTLER, J E; GLEE, P M; HAN, Y; JUTILA, J W; NAGY, J O; PASCUAL, D  
 PATENT ASSIGNEE(S): (BARG-I) BARGATZE R F; (CUTL-I) CUTLER J E; (GLEE-I) GLEE P M; (HANY-I) HAN Y; (JUTI-I) JUTILA J W; (NAGY-I) NAGY J O; (PASC-I) PASCUAL D; (LIGO-N) LIGOCYTE PHARM INC; (UYMO-N) UNIV MONTANA STATE-BOZEMAN  
 COUNTRY COUNT: 97

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002100325	A2	20021219 (200316)*	EN	56	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2003223938	A1	20031204 (200380)			
AU 2001297913	A1	20021223 (200452)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002100325	A2	WO 2001-US42712	20011015
US 2003223938	A1 Provisional	US 2000-239874P	20001013
	Cont of	WO 2001-US42712	20011015
		US 2003-412685	20030414
AU 2001297913	A1	AU 2001-297913	20011015

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001297913	A1 Based on	WO 2002100325

PRIORITY APPLN. INFO: US 2000-239874P 20001013; US  
2003-412685 20030414

AN 2003-167365 [16] WPIDS

AB WO2002100325 A UPAB: 20030307

NOVELTY - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

DETAILED DESCRIPTION - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target under physiologically relevant shear conditions, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

INDEPENDENT CLAIMS are also included for the following:

(1) a therapeutic formulation (II) in unit dose form comprising (I), to modulate a specific interaction between a cell or toxin and its receptor on a target in a host, where L1 is derived from or mimics a ligand on the cell or toxin;

(2) a vaccine (III) comprising (I), where L1 is an epitope that is derived from a pathogen, pathogen-derived toxin or tumor cell, and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell;

(3) a diagnostic imaging agent comprising (I), and further comprising a contrast agent detectable by medical resonance imaging or other visualization techniques;

(4) a delivery vehicle (IV) comprising (I), and an agent to be delivered to the target;

(5) optimizing (V) a nanoparticle displaying polyvalent binding units having L1 and L2, comprises optimizing the amount of L1 on the nanoparticle under physiologically relevant shear conditions and holding the optimized amount of L1 constant, optimizing the amount of L2 under physiologically relevant shear conditions;

(6) a nanoparticle library (VI) comprising multiple polymer beads, where each bead contains several nanoparticles associated with the surface of the polymer bead, where all of the nanoparticles associated with any one bead display the same polyvalent binding unit;

(7) a vaccine comprising (I), and a polynucleotide sequence that encodes an epitope found on a pathogen or a tumor cell and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell; and

(8) a nanoparticle produced by (VI).

ACTIVITY - Antibacterial; Fungicide; Virucide; Protozoacide; Anti-HIV; Immunostimulant; Antiinflammatory; Cytostatic.

MECHANISM OF ACTION - Vaccine; Inhibitor of lymphocyte attachment in Peyer's patch.

A variation on the Peyer's patch method was used to examine the P-selectin-mediated adhesion in a mouse mesentery venule model. A lateral incision was made into the abdominal wall to allow the small intestine to be externalized. The intestine was positioned for microscopic examination of the mesentery. A solution of PMA in phosphate buffered saline was superfused directly onto the mesentery to allow for upregulation of P-selectin in the endothelium of the mesentery venules. The area of the incision was treated and cannulation of the tail vein was performed. A variable dose of carbohydrate- and sulfate-displaying nanoparticle was administered. The results showed the reduction in number of leukocyte rolling and sticking events compared to the untreated control, and the increase in cell velocity relative to the untreated control. At the highest dosage tested (2.3 mg/kg of carbohydrate), there was a greater than 65% reduction in the number of rolling/sticking leukocytes and a nearly 90% increase in the rolling velocity, over the control.

USE - (I) is useful for sequestration of toxins in the bloodstream of a host, by administering (I) to bind a circulating toxin or toxic metabolic product, where the first ligand is derived from or mimics a receptor that specifically binds to the toxin or toxic metabolic product. The binding is effective to produce an effect such as decreased inflammation, decreased systemic toxicity, chelation therapy, neutralization of pathogens, inhibition of metastasis, inhibition of drug intoxication, tissue regeneration, selective cellular differentiation and proliferation. (I) is also useful in a diagnostic method by allowing (I) to bind to a toxin or pathogen or an antibody against such toxins or pathogens and then detecting nanoparticles bound to such toxins, pathogen or antibodies. (III) is formulated to elicit a protective immune response against a pathogen such as *Escherichia coli*, *Candida albicans*, *Brucella* sp., *Salmonella* sp., *Shigella* sp., *Pseudomonas* sp., *Bordetella* sp., *Clostridium* sp., group B strep, *E.coli* 0157, Norwalk virus, anthrax, human immunodeficiency virus (HIV), sexually transmitted diseases (STDs), Chlamydia, hepatitis B virus (HBV), malaria, cell wall proteins of *Candida* sp., and GB3 toxin from *E.coli* 0157. (IV) is useful for delivering an agent such as therapeutic or cytotoxic agent to a target. (VI) is useful

for screening agents, by adding at least one candidate agent to the nanoparticle library, and detecting binding of the agent to any one or more polymer beads in the library. The candidate agent comprises a detectable label and acts as a reporter to L1. Vaccine construct comprising (I) is useful for delivering nanoparticle therapeutic molecules to an animal (all claimed).

The polymerized nanoparticle constructs and assemblies are useful as modulators, inhibitors and enhancers and drug delivery agents for a variety of interactions as well as their down-stream effects, such as pathogen-cell attachment, pathogen-derived-toxin-cell attachment, cell-cell attachment mediated diseases, integrin adhesions, complement fixation and chemokine-mediated events. The nanoparticles are readily used as synthetic vaccines.

Dwg.0/6

L6 ANSWER 5 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2002-098663 [14] WPIDS  
DOC. NO. CPI: C2002-030908  
TITLE: Detecting heterogeneous nucleic acid sequences in organisms and cells, useful for detecting and identifying genetically modified organisms or their products.  
DERWENT CLASS: B04 D16  
INVENTOR(S): BERNAUER, H; BERNAUER, H S  
PATENT ASSIGNEE(S): (BERN-I) BERNAUER H; (BERN-I) BERNAUER H S  
COUNTRY COUNT: 97  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 10027218	A1	20011206 (200214)*		11	
WO 2001098533	A2	20011227 (200214)	GE		
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001070545	A	20020102 (200230)			
EP 1315834	A2	20030604 (200337)	GE		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 10027218	A1	DE 2000-10027218	20000531
WO 2001098533	A2	WO 2001-EP6198	20010531
AU 2001070545	A	AU 2001-70545	20010531
EP 1315834	A2	EP 2001-949371	20010531
		WO 2001-EP6198	20010531

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001070545	A Based on	WO 2001098533
EP 1315834	A2 Based on	WO 2001098533

PRIORITY APPLN. INFO: DE 2000-10027218 20000531  
AN 2002-098663 [14] WPIDS  
AB DE 10027218 A UPAB: 20020301

NOVELTY - Simultaneously detecting one or more heterogeneous nucleic acids (I), introduced into organisms and cells, where (I) includes at least one artificial sequence (II) that allows both determination of the identity of (I) and selective replication, and (II) are detected, and optionally identified, by hybridization to a chip and/or by sequencing, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a chip for use in the new process.

USE - The method is used (i) for detection/identification of genetically modified organisms and vectors (or their products), e.g. in foods or for detecting improper use and (ii) for correlating phenotypical features with particular regions of chromosomes.

ADVANTAGE - This method provides simple, rapid, inexpensive and unequivocal identification and detection of genetically modified organisms and vectors. (II) can be detected independently of the type of construct containing it.

Dwg.0/2

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

114.94

115.15

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> fil medline biosis caplus embase wpids

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.24

115.39

FILE 'MEDLINE' ENTERED AT 16:12:12 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 16:12:12 ON 22 JUL 2005

Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 16:12:12 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 16:12:12 ON 22 JUL 2005

COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> amphipathic and tail and (head (s) conjugat?)

L7 0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)

=> tail and (head (s) conjugat?)

L8 113 TAIL AND (HEAD (S) CONJUGAT?)

=> (bilayer or membrane) and tail and (head (s) conjugat?)

L9 24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)

=> dup rem 19

PROCESSING COMPLETED FOR L9

L10 11 DUP REM L9 (13 DUPLICATES REMOVED)

=> t ti 110 1-11

L10 ANSWER 1 OF 11 MEDLINE on STN DUPLICATE 1  
TI Protein circlets as sex pilus subunits.

L10 ANSWER 2 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Liposome useful for treating angiogenesis comprises a conjugate containing a vesicle-forming lipid and a non-biological, biomimetic antagonist, bound to its lipid **bilayer**.

L10 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Crystal structure of 9-(hexadecyl)imino-4,5-diazafluorene

L10 ANSWER 4 OF 11 MEDLINE on STN DUPLICATE 2  
TI Conjugates of synthetic cyclic peptides elicit bactericidal antibodies against a conformational epitope on a class 1 outer **membrane** protein of *Neisseria meningitidis*.

L10 ANSWER 5 OF 11 MEDLINE on STN DUPLICATE 3  
TI Binding of metallothionein to rat spermatozoa.

L10 ANSWER 6 OF 11 MEDLINE on STN DUPLICATE 4  
TI Relationship between fertilizing ability of frozen human spermatozoa and capacity for heparin binding and nuclear decondensation.

L10 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **MEMBRANE** SPECIALIZATIONS IN THE PAIRED SPERMATOZOA OF DYTISCID WATER BEETLES.

L10 ANSWER 8 OF 11 MEDLINE on STN DUPLICATE 5  
TI Distinct cytoskeletal domains revealed in sperm cells.

L10 ANSWER 9 OF 11 MEDLINE on STN DUPLICATE 6  
TI The features of sperm maturation in the epididymis of a marsupial, the brushtailed possum *Trichosurus vulpecula*.

L10 ANSWER 10 OF 11 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
TI The features of sperm maturation in the epididymis of a marsupial, the brushtailed possum *Trichosurus vulpecula*.

L10 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Molecular probes of spermatozoan structures

=> d ibib abs 110 2,4,

L10 ANSWER 2 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-666793 [71] WPIDS

DOC. NO. CPI: C2002-187111

TITLE: Liposome useful for treating angiogenesis comprises a conjugate containing a vesicle-forming lipid and a non-biological, biomimetic antagonist, bound to its lipid **bilayer**.

DERWENT CLASS: A96 B05 B07

INVENTOR(S): ELLENS, H M; MONCK, M A; YEH, P

PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP; (ELLE-I) ELLENS H M; (MONC-I) MONCK M A; (YEHP-I) YEH P

COUNTRY COUNT: 98

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002036073	A2	20020510 (200271)*	EN	44	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2002025878	A	20020515 (200271)			
EP 1341497	A2	20030910 (200367)	EN		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 2004013720	A1	20040122 (200407)			
JP 2004512345	W	20040422 (200428)		81	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002036073	A2	WO 2001-US46206	20011029
AU 2002025878	A	AU 2002-25878	20011029
EP 1341497	A2	EP 2001-992551	20011029
		WO 2001-US46206	20011029
US 2004013720	A1	WO 2001-US46206	20011029
		US 2003-415160	20030425
JP 2004512345	W	WO 2001-US46206	20011029
		JP 2002-538885	20011029

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002025878	A Based on	WO 2002036073
EP 1341497	A2 Based on	WO 2002036073
JP 2004512345	W Based on	WO 2002036073

PRIORITY APPLN. INFO: US 2000-245140P 20001102; US  
2003-415160 20030425

AN 2002-666793 [71] WPIDS

AB WO 2002036073 A UPAB: 20030813

NOVELTY - A liposome comprises a **conjugate** bound to its lipid **bilayer**. The **conjugate** comprises a vesicle-forming lipid having a polar **head** group and a hydrophobic **tail**, and a non-biological, biomimetic antagonist (A1) to a receptor upregulated at a disease site, directly or indirectly chemically linked to the polar **head** group of the vesicle-forming lipid.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) The conjugate useful for preparing a targeted liposomes; and  
(2) Use of the liposome in the manufacture of a medicament in the treatment of a disease caused by upregulation of the receptor.

ACTIVITY - Vasotropic; osteopathic; antiarthritic; anti-rheumatic; anti-diabetic; antipsoriatic; and cytostatic.

MECHANISM OF ACTION - In vitro alpha v beta 3 and alpha v beta 5 binder.

Disteararylphosphatidylethanolamine-polyethylene glycol-vitronectin receptor antagonist (DSPE-PEG-VRA) was synthesized by reacting (7-((4-amino-butyl)-(1H-benzoimidazol-2-ylmethyl)-carbamoyl)-4-methyl-3-oxo-2,3,4,5-tetrahydro-1H-benzo(e)(1,4)diazepin-2-yl)-acetic acid (VRA)

(50 mg) with DSPE-PEG-NHS in DMSO (10 ml). Excess amount of VRA (1.2 times molar excess) was used. The VRA was completely dissolved in DMSO. DSPE-PEG-NHS pre-dissolved in DMSO was added dropwise to the VRA solution. The resulting reaction mixture was stirred overnight in the dark at room temperature. The unreacted DSPE-PEG-NHS was quenched by the addition of excess glycine (5 times molar excess). The reaction mixture was diluted with 0.1M MES (morpholino ethanesulfonic acid) saline buffer (pH 5.8) and then dialyzed against the MES buffer (pH 5.8) to remove by-product, DMSO, and unreacted VRA. At this point the unreacted DSPG-PEG-NHS was hydrolyzed into DSPE-PEG-COOH. The resulting mixture was then dialyzed and lyophilized to form DSPE-PEG-VRA (VRA-lipid conjugate) (A). A liposome (L1) was tested for its binding affinity to human alpha v beta 3 or alpha v beta 5 using an in vitro solid phase binding assay described by Wong A, Hwang SM, McDevitt P, McNulty D, Stadel JM and Johanson K, studies on alpha v beta 3/ligand interaction using a (3H) SK and F-107260 binding assay (1996) Molecular pharmacology 50 (3):529 - 537. A control composition comprised cholesterol (40), PEG3400 DSPE (pegylated DSPE) (7) and POPC (53) was tested for the same binding test as that of the test conjugate. The binding affinity Ki (nm) of the test/control composition was 31/no binding effect.

USE - In the manufacture of a medicament for the treatment of diseases caused by upregulation of integrin and vitronectin receptor e.g. angiogenesis including restenosis, osteoarthritis, rheumatoid arthritis, diabetic retinopathy, hemangiomas, psoriasis and cancerous tumor (all claimed).

ADVANTAGE - The antagonist has binding affinity to the upregulation receptor, which is upregulated in the vascular endothelium of inflammation, infection or tumor sites.

Dwg.0/0

L10 ANSWER 4 OF 11	MEDLINE on STN	DUPLICATE 2
ACCESSION NUMBER:	95369902 MEDLINE	
DOCUMENT NUMBER:	PubMed ID: 7543883	
TITLE:	Conjugates of synthetic cyclic peptides elicit bactericidal antibodies against a conformational epitope on a class 1 outer <b>membrane</b> protein of <i>Neisseria meningitidis</i> .	
AUTHOR:	Hoogerhout P; Donders E M; van Gaans-van den Brink J A; Kuipers B; Brugghe H F; van Unen L M; Timmermans H A; ten Hove G J; de Jong A P; Peeters C C; +	
CORPORATE SOURCE:	Laboratory of Vaccine Development and Immune Mechanisms, National Institute of Public Health and Environmental Protection, Bilthoven, The Netherlands.	
SOURCE:	Infection and immunity, (1995 Sep) 63 (9) 3473-8. Journal code: 0246127. ISSN: 0019-9567.	
PUB. COUNTRY:	United States	
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)	
LANGUAGE:	English	
FILE SEGMENT:	Priority Journals	
ENTRY MONTH:	199509	
ENTRY DATE:	Entered STN: 19950930 Last Updated on STN: 19960129 Entered Medline: 19950921	
AB	Bactericidal antibodies directed against surface loops of class 1 outer <b>membrane</b> proteins play a crucial role in protection against meningitis and sepsis caused by <i>Neisseria meningitidis</i> . So far, all efforts to obtain protective antibodies against these apparently conformational epitopes by using linear peptide analogs have been in vain. In this study, <b>conjugates of head-to-tail</b> cyclic peptides encompassing the predicted top of a protective surface loop were used for immunization. A series of 18 cyclic peptides with a ring size ranging from 7 to 17 residues, conjugated to tetanus toxoid, was investigated. Antipeptide and anti-whole-cell immunoglobulin G (IgG)	

titors elicited by the conjugates were determined. Conjugates of three peptides, containing 14, 15, and 17 amino acid residues (peptides 7, 12, and 13, respectively), induced an anti-whole-cell titer when Quillaja saponin A was used as the adjuvant. When alum was used as the adjuvant, the conjugate of peptide 12 did not elicit an anti-whole-cell response. From the Quillaja saponin A group, some of the sera obtained with conjugates of peptides 7 and 12 and all sera obtained with the peptide 13 conjugate were bactericidal in vitro. None of the sera evoked with alum as the adjuvant showed bactericidal activity. Nonbactericidal sera contained IgG1 primarily, whereas bactericidal sera showed significant titers of IgG2a and IgG2b. Class 1 protein-derived synthetic cyclic peptides which are capable of eliciting bactericidal antibodies, such as peptide 13 derived from meningococcal strain H44/76, represent potential candidates for a (semi)synthetic vaccine against meningococcal disease.

=> FIL STNGUIDE

COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE  
ENTRY  
38.62

TOTAL  
SESSION  
154.01

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1	10 HEAD (S) DIFFERENT (S) EPITOPE
L2	16 HEAD (S) DIFFER? (S) EPITOPE
L3	12 DUP REM L2 (4 DUPLICATES REMOVED)
L4	288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)
L5	26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL
L6	15 DUP REM L5 (11 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

L7	0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)
L8	113 TAIL AND (HEAD (S) CONJUGAT?)
L9	24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)
L10	11 DUP REM L9 (13 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005

=> fil medline biosis caplus embase wpids

COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE  
ENTRY  
0.72

TOTAL  
SESSION  
154.73

FILE 'MEDLINE' ENTERED AT 16:24:09 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 16:24:09 ON 22 JUL 2005  
Copyright (c) 2005 The Thomson Corporation

FILE 'CPLUS' ENTERED AT 16:24:09 ON 22 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 16:24:09 ON 22 JUL 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 16:24:09 ON 22 JUL 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> 18 not 19  
L11 89 L8 NOT L9

=> dup rem 111  
PROCESSING COMPLETED FOR L11  
L12 75 DUP REM L11 (14 DUPLICATES REMOVED)

=> t ti 112 1-50

L12 ANSWER 1 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Nucleic acid strand invasion to destabilize double-stranded nucleic acid  
hybridization comprises utilizing uracil-DNA glycosylase or an enzyme  
comprising a DNA N-glycosylase activity.

L12 ANSWER 2 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Isolated or synthesized composition, useful for diagnosing and treating  
bladder disorders and cancer, comprises urinary bladder antiproliferative  
factor having sugar moieties linked to hydrophobic moiety.

L12 ANSWER 3 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric conductive composition used to modify charge transport across  
nanocrystal surface, comprises functionalized head group capable of  
binding to nanostructure surface.

L12 ANSWER 4 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Knife bayonet.

L12 ANSWER 5 OF 75 MEDLINE on STN DUPLICATE 1  
TI New insight into solvent effects on the formal HOO\* + HOO\* reaction.

L12 ANSWER 6 OF 75 MEDLINE on STN DUPLICATE 2  
TI Effect of structural factors on the stability of duplexes formed by  
oligonucleotide conjugates with minor groove binders.

L12 ANSWER 7 OF 75 CPLUS COPYRIGHT 2005 ACS on STN  
TI Effect of structural factors on the stability of duplexes formed by  
oligonucleotide conjugates with minor groove binders

L12 ANSWER 8 OF 75 CPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3  
TI Organic species that facilitate charge transfer to or from nanostructures

L12 ANSWER 9 OF 75 CPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
TI Combinatorial library of cyclic peptides as antibacterial agents

L12 ANSWER 10 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Injectable liposomal composition for delivery of a water-soluble substance  
e.g. vaccine for preventing pregnancy, comprises several liposomal  
vesicles comprising a high weight ratio of lipid to encapsulated  
water-soluble substance.

- L12 ANSWER 11 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Galvanic cell, e.g. microbattery, has cathode and anode having respective vesicle comprising benzoquinone or hydroquinone, electroactive species encapsulated into the vesicles, conducting substrate, and functionalized tethers.
- L12 ANSWER 12 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Method reducing bottom resistance of artillery projectile and gear for its implementation.
- L12 ANSWER 13 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Alkyl-substituted thieno[3,2-b]thiophene polymers and their dimeric subunits
- L12 ANSWER 14 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Cobalt-catalyzed dimerization of alkenes
- L12 ANSWER 15 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Direct observation of the ordering and molecular folding of poly[(m-phenylenevinylene)-co-(2,5-dioctyloxy-p-phenylenevinylene)]
- L12 ANSWER 16 OF 75 MEDLINE on STN DUPLICATE 5  
TI A high-spin and durable polyyradical: poly(4-diphenylaminium-1,2-phenylenevinylene).
- L12 ANSWER 17 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Solvatochromic, thermochromic and photoluminescent properties of poly(3-octylthiophene)
- L12 ANSWER 18 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Soft propylene resin composition for films and sheets comprises stereoblock propylene polymer containing isotactic block, and propylene-ethylene copolymer.
- L12 ANSWER 19 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Preparation of vulcanizable composition for tire tread comprises forming premix including processing aids and rubber and mixing premix with carbon black.
- L12 ANSWER 20 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Immobilization of electroactive polymerized vesicles to conducting substrate in electrode of microbattery comprises allowing suspension of vesicles to contact substrate in the presence of functionalized tether.
- L12 ANSWER 21 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Alpha-olefin terpolymer comprises aliphatic alpha-olefins, and vinyl aromatic monomers optionally substituted by alkyl radicals, and contains block(s) of three vinyl aromatic monomers in head-tail-tail insertion fashion.
- L12 ANSWER 22 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Frolov's bullet.
- L12 ANSWER 23 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Percussive-indexing mechanism.
- L12 ANSWER 24 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Regioregular **Head-to-Tail** Poly(4-alkylquinoline)s: Synthesis, Characterization, Self-Organization, Photophysics, and Electroluminescence of New n-Type **Conjugated** Polymers
- L12 ANSWER 25 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN

- TI On the structural effects of the head-to-tail coupled oligo(3-alkylthiophenes) on their optical properties
- L12 ANSWER 26 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Generating a modified protein with reduced antigenicity for treating cancer, AIDS, autoimmune diseases, comprises identifying a protein region antigenic in the first subject using antiserum from either the first or a second subject.
- L12 ANSWER 27 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New n-type polythiophene composition for fabricating thin film field effect transistors.
- L12 ANSWER 28 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Bullet of sporting gun cartridge for rifled weapon.
- L12 ANSWER 29 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Poly(1,2-phenylenevinylene) Ferromagnetically 3,5-Bearing Phenoxy Radical
- L12 ANSWER 30 OF 75 MEDLINE on STN DUPLICATE 6  
TI Design and synthesis of a 256-membered **pi-conjugated** oligomer library of regioregular **head-to-tail** coupled quater(3-arylthiophene)s.
- L12 ANSWER 31 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7  
TI Epitopes formed by non-covalent association of conjugates
- L12 ANSWER 32 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Sequence Length Distributions (Microstructure) of Regioregular Poly(3-alkylthiophene)s and Related Conjugated Polymers and Their Use in Simulating  $\pi-\pi^*$  Absorption Peak Profiles
- L12 ANSWER 33 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Poly(3-phenylgalvinoxylthiophene). A new conjugated polyyradical with high spin concentration
- L12 ANSWER 34 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Undular jump in open-channel flow over a sill
- L12 ANSWER 35 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation and characterization of regioregular **head-to-tail**  $\pi$ - **conjugated** poly(pyridine-2,5-diyl)s
- L12 ANSWER 36 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Use of asialo-glycoproteins for treating liver disease, e.g. viral hepatitis, and targeting a glycoprotein to a hepatocyte.
- L12 ANSWER 37 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Grinding head.
- L12 ANSWER 38 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Copolymer of aromatic vinyl, olefin, and non-conjugated diene having improved mechanical strength, elasticity and transparency.
- L12 ANSWER 39 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Ferromagnetic Spin Alignment in Head-to-Tail Coupled Oligo(1,4-phenyleneethynylene)s and Oligo(1,4-phenylenevinylene)s Bearing Pendant p-Phenylenediamine Radical Cations
- L12 ANSWER 40 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Two-dimensional crystals of poly(3-alkylthiophene)s: direct visualization

of polymer folds in submolecular resolution

- L12 ANSWER 41 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation of Conjugated Gels of Regioregular HT Sexi(3-n-octylthiophene) and Related Star Molecules
- L12 ANSWER 42 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI  $\pi$ -Conjugated polymers prepared by organometallic polycondensation and metal complexes of the polymers
- L12 ANSWER 43 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Regioregular polymerization of 3-semifluoroalkylthiophenes.
- L12 ANSWER 44 OF 75 MEDLINE on STN DUPLICATE 8  
TI Synthesis of a single-tailed cationic lipid and investigation of its transfection.
- L12 ANSWER 45 OF 75 MEDLINE on STN DUPLICATE 9  
TI The Xenopus Emx genes identify presumptive dorsal telencephalon and are induced by head organizer signals.
- L12 ANSWER 46 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Lubricating oil for mitigating sludge formation in engine oil - contains a minor amount of alkyl substituted hydroxy aromatic compound formed by alkylation of ethylene -alpha-olefin copolymer.
- L12 ANSWER 47 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and characterization of poly[3-(butylthio)thiophene]: a regioregular head-to-tail polymer
- L12 ANSWER 48 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Use of nucleic acid ligands in flow cytometry
- L12 ANSWER 49 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 10  
TI Living Polymerization of (o-(Trimethylsilyl)phenyl)acetylene by Molybdenum Imido Alkylidene Complexes
- L12 ANSWER 50 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Solvent effect on the bathochromic shifts of push-pull dihexylbithiophenes with head-to-head and head-to-tail orientations
- => t ti l12 51-75
- L12 ANSWER 51 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Electroluminescence of regioregular poly(alkylthiophenes)
- L12 ANSWER 52 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Thiophene:alkylthiophene copolymers from substituted dialkyloligothiophenes
- L12 ANSWER 53 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI A dramatic conjugational interchange in the regioregular polythiophene, HT-poly(3-[2,5,8-trioxanonyl]thiophene) via a chemoselective recognition response
- L12 ANSWER 54 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Mercurophilic 1-(8,8-dicyanoheptafulven-3-yl)aza-15-crown-5 ether. Synthesis, x-ray structural analysis, and fixation of its derivative on a polymer
- L12 ANSWER 55 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN

- TI The effect of stereoregularity on the structure of poly(octylthiophene): an x-ray diffraction study
- L12 ANSWER 56 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Site-specific immunoconjugates
- L12 ANSWER 57 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Conducting polymers from anodic coupling of some regiochemically defined dialkoxy-substituted thiophene oligomers
- L12 ANSWER 58 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI The tuning of **conjugation** by recipe: the synthesis and properties of random **head-to-tail** poly(3-alkylthiophene) copolymers
- L12 ANSWER 59 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric nonlinear optical material - contains functional gps. at both ends which can form hydrogen bond in **head-to-tail** form, and does not cause relaxation or orientation.
- L12 ANSWER 60 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and physical properties of self-orienting **head-to-tail** polythiophenes
- L12 ANSWER 61 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Toward tuning electrical and optical properties in **conjugated** polymers using side-chains: highly conductive **head-to-tail**, heteroatom functionalized polythiophenes
- L12 ANSWER 62 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Low-temperature magnetic properties for poly(3-alkylthiophenes) and poly(4,4'-dialkyl-2,2'-bithiophenes)
- L12 ANSWER 63 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Polyazomethine conjugated polymer film with second-order nonlinear optical properties fabricated by electric-field-assisted chemical vapor deposition
- L12 ANSWER 64 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Reactions proceeding via the reactive intermediate  $\alpha$ -vinyl-p-xylylene. Contrasting orientations in the formation of cyclic dimers and polymer
- L12 ANSWER 65 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Structural and quantitative analysis of surface modified poly(vinylidene fluoride) films using ATR FT-IR spectroscopy
- L12 ANSWER 66 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Variable teeth angle reamer - has calibrating section with land widening from head to **tail** end while front angle of teeth decreases.
- L12 ANSWER 67 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Improving colour of aromatic thermoplastic polymer - by treatment with peroxy cpd..
- L12 ANSWER 68 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI The Michael induced Ramberg-Baeklund homologation to conjugated isoprenoids
- L12 ANSWER 69 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Electroinitiated polymerization through acetylene and nitrile group bonds
- L12 ANSWER 70 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN

- TI Thermal and radiation-induced dehydrochlorination of poly(vinyl chloride).  
 II. Head-to-head structures
- L12 ANSWER 71 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Structure and stereochemistry of nucleic acid components and their reaction products. III. Crystal structure of the potassium salt of N-(purin-6-ylcarbamoyl)-L-threonine. Possible role of hypermodified bases adjacent to anticodon in codon-anticodon interaction
- L12 ANSWER 72 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Polymer microstructure
- L12 ANSWER 73 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Molecular-orbital theory of reactivity in radical polymerization. II
- L12 ANSWER 74 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Long-chain acids. I. Extension of the isoprene rule
- L12 ANSWER 75 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Cordless tyre - with tread of ethylene/propylene/diene terpolymer, and sidewall of segmented copolyester.

=> d ibib abs 112 44,48,56

L12 ANSWER 44 OF 75 MEDLINE on STN DUPLICATE 8  
 ACCESSION NUMBER: 1999459173 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 10528072  
 TITLE: Synthesis of a single-tailed cationic lipid and investigation of its transfection.  
 AUTHOR: Tang F; Hughes J A  
 CORPORATE SOURCE: University of Florida, College of Pharmacy, Department of Pharmaceutics, Gainesville, FL 32610, USA.  
 CONTRACT NUMBER: P01-AG10485 (NIA)  
 R29-H 1 55779  
 SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (1999 Dec 6) 62 (3) 345-58.  
 Journal code: 8607908. ISSN: 0168-3659.  
 PUB. COUNTRY: Netherlands  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) .  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199912  
 ENTRY DATE: Entered STN: 20000113  
 Last Updated on STN: 20000113  
 Entered Medline: 19991216

AB Single-tailed cationic lipids were originally reported to have low transfection efficiency and high toxicity in plasmid delivery. We hypothesized that particular single-tailed cationic lipids may also function in plasmid transfection. To test this hypothesis, we synthesized a new cationic lipid-oleoyl ornithinate (OLON). To decrease cytotoxicity, we then introduced a potential biodegradable ester bond in the tail of lipid yielding 6-lauroxyhexyl ornithinate (LHON). The data demonstrated that the cytotoxicity of LHON was lower than that of 1,2-dioleoyl-3-trimethylammonium-propane (DOTAP) or OLON. To investigate the transfection activity of the new lipids and determine the cellular uptake of DNA/liposome complexes, we compared the transfection of liposomes produced from double-tailed 1',2'-dioleyl-sn-glycero-3'-succinyl-1, 6-hexanediol ornithine conjugate (DOGSHDO) with an ornithine headgroup, single-tailed OLON with an ornithine head group, double-tailed DOTAP with quaternary amine group, and single-tailed cetyltrimethylammonium bromide (CTAB) with a quaternary amine group. At

the optimal ratios as defined in transfection experiments, OLON/DOPE had more than 10 times the transgene expression than other liposomes even though the DNA uptake was not necessarily greater. In the experiments comparing the release of DNA from DNA/liposome complexes by anionic substances, a greater fraction of DNA was released from DNA/OLON/DOPE complexes than that from DNA/DOTAP/DOPE complexes.

L12 ANSWER 48 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1997:145215 CAPLUS  
 DOCUMENT NUMBER: 126:141764  
 TITLE: Use of nucleic acid ligands in flow cytometry  
 INVENTOR(S): Davis, Ken; Jayasena, Sumedha; Gold, Larry  
 PATENT ASSIGNEE(S): Nexstar Pharmaceuticals, Inc., USA; Becton Dickinson and Company  
 SOURCE: PCT Int. Appl., 38 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 127  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641019	A1	19961219	WO 1996-US8089	19960530
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML				
US 5853984	A	19981229	US 1995-479729	19950607
AU 9661470	A1	19961230	AU 1996-61470	19960530
EP 832299	A1	19980410	EP 1996-919017	19960530
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AU 773741	B2	20040603	AU 2001-18257	20010202
AU 773815	B2	20040610	AU 2001-29834	20010323
PRIORITY APPLN. INFO.:			US 1995-479729	A 19950607
			US 1990-536428	B2 19900611
			AU 1991-82061	A0 19910610
			US 1991-714131	A2 19910610
			US 1992-964624	A2 19921021
			US 1994-199507	A2 19940222
			US 1994-234997	A2 19940428
			AU 1996-58839	A3 19960530
			WO 1996-US8089	W 19960530
			AU 1996-61611	A3 19960604

AB This invention discloses the use of SELEX-developed high-affinity oligonucleotide ligands in flow cytometry diagnostic applications. Specifically, DNA ligands having one or more fluorophore mols. attached are disclosed which are useful in flow cytometry.

L12 ANSWER 56 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1996:83878 CAPLUS  
 DOCUMENT NUMBER: 124:172723  
 TITLE: Site-specific immunoconjugates  
 AUTHOR(S): Werlen, R. C.; Lankinen, M.; Smith, A.; Chernushevich, I.; Standing, K. G.; Blakey, D. C.; Shuttleworth, H.; Melton, R. G.; Offord, R. E.; Rose, K.  
 CORPORATE SOURCE: Dep. Biochim. Med., Centre Med. Univ., Geneca, CH-1211, Switz.  
 SOURCE: Tumor Targeting (1995), 1(5), 251-8

CODEN: TUTAF9; ISSN: 1351-8488

PUBLISHER:

Chapman & Hall

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

AB A review and discussion with 19 refs. The conjugation of two proteins with different activities in order to get a conjugate with a new hybrid activity is a field of intense investigation. The standard way of preparing such

conjugates uses random acylation of lysine side-chains with heterobifunctional reagents, leading to a mixture of conjugates where both protein partners are linked to one another in different orientations. To circumvent this difficulty, we are developing precise conjugation techniques for the preparation of site-specific protein conjugates. Here we review the preparation, characterization and the use of three such site-specific immunoconjugates: an antibody fragment-enzyme conjugate designed for ADEPT (antibody-directed enzyme prodrug therapy) and two F(ab')3 constructions prepared with different linkers. The ADEPT conjugate is a **head-to-tail conjugate**

between an F(ab')3 antibody fragment and the enzyme carboxypeptidase G2 (CPG2). The components are linked through the formation of a hydrazone bond between a carbohydrazide, introduced at the C-terminus of the truncated heavy chain of the antibody fragment by reverse proteolysis, and an aldehyde, obtained by mild periodate oxidation of a threonine introduced at the N-terminus of the CPG2 by genetic engineering. This conjugate has been characterized by ESI-TOF (electrospray ionization time of flight) mass spectrometry and its *in vitro* and *in vivo* behavior was compared with that of a corresponding random conjugate. For the preparation of both F(ab')3 constructions, an Fab with a single thiol group was first prepared by digestion with appropriate proteases. In the first case, the thiol was then converted to an aminooxy group. A trivalent construct was then obtained by polyoxime formation with a trialdehyde template. This F(ab')3 has been characterized by ESI-TOF mass spectrometry and its biodistribution in tumor-bearing mice has been investigated. The second F(ab')3 was obtained starting with the same Fab, but the trivalent construct was prepared on a template containing two aldehydes and a maleimide group, allowing the introduction of three Fab in three different steps.

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1 10 HEAD (S) DIFFERENT (S) EPITOPE  
L2 16 HEAD (S) DIFFER? (S) EPITOPE  
L3 12 DUP REM L2 (4 DUPLICATES REMOVED)  
L4 288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)  
L5 26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL  
L6 15 DUP REM L5 (11 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

L7 0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)  
L8 113 TAIL AND (HEAD (S) CONJUGAT?)  
L9 24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)  
L10 11 DUP REM L9 (13 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:24:09 ON 22 JUL 2005

L11 89 L8 NOT L9  
L12 75 DUP REM L11 (14 DUPLICATES REMOVED)

=> (bilayer or membrane) and (head (s) conjugat?)  
L13 87 (BILAYER OR MEMBRANE) AND (HEAD (S) CONJUGAT?)

=> l13 not 19  
L14 63 L13 NOT L9

=> dup rem l14  
PROCESSING COMPLETED FOR L14  
L15 38 DUP REM L14 (25 DUPLICATES REMOVED)

=> t ti l15 1-38

L15 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Formulations, conjugates, and combinations of drugs for the treatment of neoplasms

L15 ANSWER 2 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New anti-tumor and cobalamin conjugate comprising cobalamin or its derivatives or analogue, linker and anti-tumor drug to treat tumor related disorder or disease e.g. Hodgkin's disease, neurofibromatosis and cervical dysplasia.

L15 ANSWER 3 OF 38 MEDLINE on STN DUPLICATE 1  
TI Preferred conformations of endogenous cannabinoid ligand anandamide.

L15 ANSWER 4 OF 38 MEDLINE on STN DUPLICATE 2  
TI In vivo and in vitro reconstitution of atg8 conjugation essential for autophagy.

L15 ANSWER 5 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
TI Macaque sperm release ESP13.2 and PSP94 during capacitation: The absence of ESP13.2 is linked to sperm-zona recognition and binding.

L15 ANSWER 6 OF 38 MEDLINE on STN DUPLICATE 3  
TI Distal cationic poly(ethylene glycol) lipid conjugates in large unilamellar vesicles prepared by extrusion enhance liposomal cellular uptake.

L15 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
TI Human monoclonal antibodies specific to prostate specific **membrane** antigen (PSMA) for cancer diagnosis and therapy

L15 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Humanized murine anti-epithelial glycoprotein 1 (EGP-1) antibodies RS7 and conjugates for diagnosis and treatment of cancer

L15 ANSWER 9 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Enhancement of transport of biological agent, e.g. antifungal agent, across **membrane**, comprising use of conjugate containing biological agent and oligomer with guanidino or amidino side chains.

L15 ANSWER 10 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New colloidal carrier composition useful for e.g. passive targeting of drugs to sites of pathology, comprises active agent and lipid-polymer conjugate comprising amphiphilic lipid and polymer e.g. poly-(amino acid derivative).

- L15 ANSWER 11 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New lipid polymer conjugate useful for e.g. vesicular **bilayer** systems for use e.g. in therapy, comprises e.g. poly-amino acid derivative or poly-amino acid analogue polymer, and lipid attached to nitrogen or carbon terminal of polymer.
- L15 ANSWER 12 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New isolated or recombinant Bcl-B nucleic acids and polypeptides, for treating a disorder associated with apoptosis, such as cell degenerative or proliferative disorder e.g. cancer, Alzheimer's disease or Parkinson's disease.
- L15 ANSWER 13 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Biocompatible material useful for e.g. controlling cellular growth comprises at least two component surface.
- L15 ANSWER 14 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Composition comprising a combination of an oxidizing and/or reducing agent, a protein-denaturing agent, and a hapten, useful for treating neoplasms, tumors, and cancers.
- L15 ANSWER 15 OF 38 MEDLINE on STN  
TI Orienting otolith-ocular reflexes in the rabbit during static and dynamic tilts and off-vertical axis rotation.
- L15 ANSWER 16 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New **membrane** permanent peptide complexes for medical imaging, diagnostics and therapy.
- L15 ANSWER 17 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric assay film for direct colorimetric detection of small molecules such as pathogens.
- L15 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Effect of PEG-lipid conjugates on the phase behavior of phosphatidylethanolamine dispersions
- L15 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Receptor membranes.
- L15 ANSWER 20 OF 38 MEDLINE on STN  
TI Otolith and semicircular canal contributions to the human binocular response to roll oscillation.
- L15 ANSWER 21 OF 38 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 5  
TI Determination of imazethapyr using capillary column flow injection liposome immunoanalysis.
- L15 ANSWER 22 OF 38 MEDLINE on STN  
TI Lectin binding characteristics of squamous cell carcinomas of the head and neck.
- L15 ANSWER 23 OF 38 MEDLINE on STN DUPLICATE 6  
TI Evidence for a direct action of GH on haemopoietic cells of a marine fish, the gilthead sea bream (*Sparus aurata*).
- L15 ANSWER 24 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Ink-jet recording **head** with uniform **conjugation** of the second.

- L15 ANSWER 25 OF 38 MEDLINE on STN DUPLICATE 7  
TI Lipid-amphotericin B complex structure in solution: a possible first step in the aggregation process in cell membranes.
- L15 ANSWER 26 OF 38 MEDLINE on STN  
TI [Clinical evaluation of otolithic function by the measurement of ocular cyclotorsion and skew deviation].  
Evaluation clinique de la fonction otolithique par mesure de la cyclotorsion oculaire et de la "skew deviation".
- L15 ANSWER 27 OF 38 MEDLINE on STN DUPLICATE 8  
TI Induction of vesicle-to-micelle transition by bile salts for DOPE vesicles incorporating immunoglobulin G.
- L15 ANSWER 28 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Receptor **membrane** for bio-sensors - comprising a closely packed array of self-assembling amphiphilic molecules having ion channels and/or receptor molecules.
- L15 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Differential localization of glycoconjugates having affinity for concanavalin A on the surface of the sperm head in the testis, the epididymis, and the ejaculate of the ram
- L15 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI pH-dependent stability and fusion of liposomes combining protonatable double-chain amphiphiles with phosphatidylethanolamine
- L15 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Identifying regions of **membrane** proteins in contact with phospholipid head groups: covalent attachment of a new class of aldehyde lipid labels to cytochrome c oxidase
- L15 ANSWER 32 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Localization of carbohydrate components in human synovial lining cells by binding with fluoresceinated lectins and their digestion with neuraminidase
- L15 ANSWER 33 OF 38 MEDLINE on STN DUPLICATE 9  
TI Immunocytochemical localization of acrosin in boar spermatozoa.
- L15 ANSWER 34 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI Immunocytochemical localization of acrosin in boar spermatozoa.
- L15 ANSWER 35 OF 38 MEDLINE on STN  
TI Branching pattern and properties of vertical- and horizontal-related excitatory vestibuloocular neurons in the cat.
- L15 ANSWER 36 OF 38 MEDLINE on STN DUPLICATE 10  
TI A novel approach for the topographical localization of glycolipids on the cell surface.
- L15 ANSWER 37 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 11  
TI Physiological studies on the sperm surface component responsible for sperm-egg bonding in sea urchin fertilization. II. Effect of concanavalin A on the fertilizing capacity of sperm
- L15 ANSWER 38 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI Ultrasonic tomography in obstetrics and gynecology: Experimental results and clinical methods.

=> d ibib abs 1,9-11,13-15,17-19,25,27-31,36 115

L15 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2005:216611 CAPLUS  
DOCUMENT NUMBER: 142:291340  
TITLE: Formulations, conjugates, and combinations of drugs  
for the treatment of neoplasms  
INVENTOR(S): Nichols, James M.; Foley, Michael A.; Keith, Curtis;  
Padval, Mahesh; Elliott, Peter  
PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA  
SOURCE: PCT Int. Appl., 92 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005020913	A2	20050310	WO 2004-US27695	20040825
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005080075	A1	20050414	US 2004-925835	20040825
PRIORITY APPLN. INFO.:			US 2003-497617P	P 20030825
OTHER SOURCE(S):	MARPAT	142:291340		
AB	The invention provides formulations and structural modifications for phenothiazine compds. which result in altered biodistribution, thereby reducing the occurrence of adverse reactions associated with this class of drug.			

L15 ANSWER 9 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-558976 [52] WPIDS  
DOC. NO. CPI: C2003-150616  
TITLE: Enhancement of transport of biological agent, e.g.  
antifungal agent, across **membrane**, comprising  
use of conjugate containing biological agent and oligomer  
with guanidino or amidino side chains.  
DERWENT CLASS: B05  
INVENTOR(S): JESSOP, T C; PATTABIRAMAN, K; PELKEY, E T; ROTHBARD, J B;  
WENDER, P A  
PATENT ASSIGNEE(S): (JESS-I) JESSOP T C; (PATT-I) PATTABIRAMAN K; (PELK-I)  
PELKEY E T; (ROTH-I) ROTHBARD J B; (WEND-I) WENDER P A;  
(CELL-N) CELLGATE INC; (STRD) UNIV LELAND STANFORD JUNIOR  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003049772	A2	20030619 (200352)*	EN	58	
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW				

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
 RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA  
 ZM ZW  
 US 2003185788 A1 20031002 (200365)  
 AU 2002359679 A1 20030623 (200420)  
 US 2004161405 A9 20040819 (200455)  
 EP 1461084 A2 20040929 (200463) EN  
 R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC  
 MK NL PT RO SE SI SK TR

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003049772	A2	WO 2002-US39698	20021211
US 2003185788	A1 Provisional	US 2001-339696P	20011211
		US 2002-318278	20021211
AU 2002359679	A1	AU 2002-359679	20021211
US 2004161405	A9 Provisional	US 2001-339696P	20011211
		US 2002-318278	20021211
EP 1461084	A2	EP 2002-794232	20021211
		WO 2002-US39698	20021211

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002359679	A1 Based on	WO 2003049772
EP 1461084	A2 Based on	WO 2003049772

PRIORITY APPLN. INFO: US 2001-339696P 20011211; US  
 2002-318278 20021211

AN 2003-558976 [52] WPIDS

AB WO2003049772 A UPAB: 20030813

NOVELTY - The transport of a compound across a biological **membrane** is enhanced by contacting the **membrane** with a conjugate containing the biological agent covalently attached to a transport reagent containing a polymer with comprising 6 - 25 subunits with a guanidino or amidino side chain moiety in at least 50% of the subunits.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for guanidinium compounds of formula (I).

m = 6 - 25;

T = first terminal functional group or L (both optionally protected);

L = linking group having an attached therapeutic agent;

W = second terminal functional group or L (both optionally protected);

Xi = backbone subunit;

i = numbering system of 1 - 25;

Yi = H, amino acid side chain, (hetero)aryl, 1-8C alkylene, 2-8C alkenylene, 2-8C alkynylene, 2-8C heteroalkylene, 3-8C cycloalkylalkylene, 2-8C spirocycloalkylene and/or (hetero)arylene;

n = 0 - 2;

Zi = -NHC(=NH2)NH2(+), pyrrolidine-1-carboxamidin-yl, 2-amino-4,5-dihydro-3H-imidazol-1-ium-5-yl, imidazolidin-2-ylidene-ammonium-1-yl, 1,3-dihydro-benzoimidazol-2-ylidene-ammonium-1-yl, 1,3-dihydro-imidazol-2-ylidene-ammonium-1-yl, or 1,3-dihydro-benzoimidazol-2-ylidene-ammonium-yl; and provided that:

(i) when n is 0, then Yi is H, amino acid side chain, or

(hetero)aryl;

(ii) when n is 1, then Yi is 1-8C alkylene, 2-8C alkenylene, 2-8C alkynylene, 2-8C heteroalkylene, 3-8C cycloalkylalkylene, 2-8C spirocycloalkylene and/or (hetero)arylene;

(iii) T and W do not simultaneously contain an attached therapeutic agent; and

(iv) (I) has at least 4 guanidinium moieties and the position of the compound joining W and T is not a polypeptide.

USE - For enhancing transport of biological agents such as diagnostic agent, anticancer agent, antifungal agent, antibacterial agent or anti-inflammation agent, across a biological **membrane** (claimed).

The method is also useful for screening the biological activity of agents which are unable or poorly able to enter cells by themselves.

ADVANTAGE - The method promotes transport of the conjugate across the **membrane** at a higher rate than the trans-**membrane**

transport rate of the biological agent in the non-conjugated form. It provides an efficient way of identifying active agents that might not otherwise be accessible through large scale screening programs, for lack of an effective and convenient way of transporting the agent into the cell or organelle, and enables the testing of activities of agents that by themselves are unable or poorly able to enter cells to manifest biological activity. The delivery of small organic molecules having poor solubilities in aqueous liquids such as serum and aqueous saline can be administered in greater dosage and with more efficacy.

Dwg.0/23

L15 ANSWER 10 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-229291 [22] WPIDS  
CROSS REFERENCE: 2003-247851 [24]  
DOC. NO. CPI: C2003-058853  
TITLE: New colloidal carrier composition useful for e.g. passive targeting of drugs to sites of pathology, comprises active agent and lipid-polymer conjugate comprising amphiphilic lipid and polymer e.g. poly-(amino acid derivative).  
DERWENT CLASS: A23 A96 B07  
INVENTOR(S): BRUIN, P; DE BOER, L W T; DE VRINGER, T; HENNINK, W E; METSELAAR, J M; OUSSOREN, C; STORM, G; DEBOER, L W T; HENNICK, W E; THEODORUS, D B L W  
PATENT ASSIGNEE(S): (YAMA) YAMANOUCHI EURO BV; (BRUI-I) BRUIN P; (DVRI-I) DE VRINGER T; (HENN-I) HENNICK W E; (METS-I) METSELAAR J M; (OUSS-I) OUSSOREN C; (STOR-I) STORM G; (THEO-I) THEODORUS D B L W  
COUNTRY COUNT: 91  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002098952	A1	20021212 (200322)*	EN	51	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AU BA BB BG BR BZ CA CN CO CR CU CZ DM DZ EC EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MA MG MK MN MX NO NZ OM PH PL RO SG SI SK TT UA US UZ VN YU ZA				
EP 1392755	A1	20040303 (200417)	EN		
R:	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR				
NO 2003005264	A	20040128 (200419)			
SK 2003001597	A3	20040608 (200441)			
CZ 2003003480	A3	20040714 (200448)			
KR 2004027512	A	20040401 (200451)			
KR 2004027513	A	20040401 (200451)			

AU 2002319248	A1	20021216	(200452)	
JP 2004527586	W	20040909	(200459)	84
CN 1520435	A	20040811	(200476)	
US 2004241222	A1	20041202	(200480)	
ZA 2003008937	A	20050126	(200513)	57
BR 2002009699	A	20050201	(200515)	
IN 2003001882	P4	20041211	(200530)	EN
MX 2003011049	A1	20040701	(200545)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002098952	A1	WO 2002-EP6783	20020603
EP 1392755	A1	EP 2002-748799	20020603
		WO 2002-EP6783	20020603
NO 2003005264	A	WO 2002-EP6783	20020603
		NO 2003-5264	20031127
SK 2003001597	A3	WO 2002-EP6783	20020603
		SK 2003-1597	20020603
CZ 2003003480	A3	WO 2002-EP6783	20020603
		CZ 2003-3480	20020603
KR 2004027512	A	KR 2003-715720	20031201
KR 2004027513	A	KR 2003-715722	20031201
AU 2002319248	A1	AU 2002-319248	20020603
JP 2004527586	W	WO 2002-EP6783	20020603
		JP 2003-502070	20020603
CN 1520435	A	CN 2002-812735	20020603
US 2004241222	A1	WO 2002-EP6783	20020603
		US 2004-479031	20040617
ZA 2003008937	A	ZA 2003-8937	20031117
BR 2002009699	A	BR 2002-9699	20020603
IN 2003001882	P4	WO 2002-EP6783	20020603
		IN 2003-CN1882	20031201
MX 2003011049	A1	WO 2002-EP6783	20020603
		MX 2003-11049	20031201

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1392755	A1 Based on	WO 2002098952
SK 2003001597	A3 Based on	WO 2002098952
CZ 2003003480	A3 Based on	WO 2002098952
AU 2002319248	A1 Based on	WO 2002098952
JP 2004527586	W Based on	WO 2002098952
BR 2002009699	A Based on	WO 2002098952
MX 2003011049	A1 Based on	WO 2002098952

PRIORITY APPLN. INFO: EP 2001-202107 20010601  
 AN 2003-229291 [22] WPIDS  
 CR 2003-247851 [24]  
 AB WO 200298952 A UPAB: 20050715  
 NOVELTY - New colloidal carrier composition (I) comprises:  
 (i) an active agent; and  
 (ii) a lipid-polymer conjugate (Ia).  
 DETAILED DESCRIPTION - New colloidal carrier composition (I) comprises:  
 (1) an active agent; and  
 (2) a lipid-polymer **conjugate** (Ia) which is obtainable from  
 amphiphilic lipid that consists of at least one hydrophobic apolar moiety

and hydrophilic polar **head** group, and polymer or its monomeric precursor, where the polymer is poly-(amino acid), poly-(amino acid derivative) or poly-(amino acid analog).

(Ia) provides long-circulating properties to (I).

ACTIVITY - Cytostatic; Antibacterial; Antiinflammatory.

USE - (I) is useful for providing a therapeutic agent, a biological agent, physiological agent, prophylactic or diagnostic agent (including imaging agents and radio-actively labeled compounds) in e.g. vesicular **bilayer** systems such as liposomes, niosomes and reversed vesicles, micellar systems, nanocapsules and nanospheres. (I) is also useful for passive targeting to sites of pathology (e.g. tumors, infection, inflammation) and for active targeting to cells in bloodstream, to endothelium. (I) is also useful as an artificial oxygen delivery system, blood-pool imaging and anti-fouling coating for biomaterials.

ADVANTAGE - The stability of liposomes prepared with (Ia) is improved as compared to that of conventional liposome preparations. (Ia) when incorporated into (I) provides long-circulating properties to these compositions. (Ia) is biodegradable and has reduced lipid-dose dependency as compared with polyethylene glycol-liposomes. An increased clearance after second injection of the composition is not always observed, and the reduction in blood circulation time is moderate. In an in vivo experimental arthritis model, one single intravenous injection of (I) appeared effective repeated injections of non-encapsulated corticosteroid compound or when encapsulated in conventional liposomes. Also, side effects associated with corticosteroid-based therapy will be reduced, due to reduction in the amount of corticosteroids that has to be administered.

DESCRIPTION OF DRAWING(S) - The figure shows a graphical representation of the mean values for the calculated percentage injected dose in blood samples versus time for polyethylene glycol-distearoyl phosphatidylethanolamine (PEG-DSPE)-containing liposomal preparations, having a different amount of lipid.

Dwg.1/6

L15 ANSWER 11 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-247851 [24] WPIDS

CROSS REFERENCE: 2003-229291 [22]

DOC. NO. CPI: C2003-063721

TITLE: New lipid polymer conjugate useful for e.g. vesicular **bilayer** systems for use e.g. in therapy, comprises e.g. poly-amino acid derivative or poly-amino acid analogue polymer, and lipid attached to nitrogen or carbon terminal of polymer.

DERWENT CLASS: A23 A96 B07

INVENTOR(S): BRUIN, P; DE BOER, L W T; DE VRINGER, T; HENNINK, W E; METSELAAR, J M; OUSSOREN, C; STORM, G; DE BRINGER, T; METSELLAR, J M; DEBOER, L W T; HENNICK, W E; VRINGER, T D (YAMA) YAMANOUCHI EURO BV; (BRUI-I) BRUIN P; (DBOE-I) DE BOER L W T; (HENN-I) HENNICK W E; (METS-I) METSELAAR J M; (OUSS-I) OUSSOREN C; (STOR-I) STORM G; (VRIN-I) VRINGER T D

COUNTRY COUNT: 91

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2002098951	A2 20021212 (200324)*	EN	44	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW			
W:	AE AG AL AU BA BB BG BR BZ CA CN CO CR CU CZ DM DZ EC EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MA MG MK MN MX NO NZ OM PH PL RO SG SI SK TT UA US UZ VN YU ZA			
EP 1392756	A2 20040303 (200417)	EN		

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI TR

NO 2003005263	A 20040128	(200419)	
SK 2003001598	A3 20040608	(200441)	
CZ 2003003479	A3 20040714	(200448)	
AU 2002320851	A1 20021216	(200452)	
JP 2004527585	W 20040909	(200459)	78
US 2004254352	A1 20041216	(200482)	
BR 2002009695	A 20050111	(200512)	
ZA 2003008938	A 20050126	(200513)	56
IN 2003001888	P4 20041211	(200530)	EN
MX 2003011050	A1 20040701	(200545)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002098951	A2	WO 2002-EP6432	20020603
EP 1392756	A2	EP 2002-754661	20020603
		WO 2002-EP6432	20020603
NO 2003005263	A	WO 2002-EP6432	20020603
		NO 2003-5263	20031127
SK 2003001598	A3	WO 2002-EP6432	20020603
		SK 2003-1598	20020603
CZ 2003003479	A3	WO 2002-EP6432	20020603
		CZ 2003-3479	20020603
AU 2002320851	A1	AU 2002-320851	20020603
JP 2004527585	W	WO 2002-EP6432	20020603
		JP 2003-502069	20020603
US 2004254352	A1	WO 2002-EP6432	20020603
		US 2004-479319	20040723
BR 2002009695	A	BR 2002-9695	20020603
		WO 2002-EP6432	20020603
ZA 2003008938	A	ZA 2003-8938	20031117
IN 2003001888	P4	WO 2002-EP6432	20020603
		IN 2003-CN1888	20031201
MX 2003011050	A1	WO 2002-EP6432	20020603
		MX 2003-11050	20031201

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1392756	A2 Based on	WO 2002098951
SK 2003001598	A3 Based on	WO 2002098951
CZ 2003003479	A3 Based on	WO 2002098951
AU 2002320851	A1 Based on	WO 2002098951
JP 2004527585	W Based on	WO 2002098951
BR 2002009695	A Based on	WO 2002098951
MX 2003011050	A1 Based on	WO 2002098951

PRIORITY APPLN. INFO: EP 2001-202107 20010601

AN 2003-247851 [24] WPIDS

CR 2003-229291 [22]

AB WO 200298951 A UPAB: 20050715

NOVELTY - New lipid polymer **conjugate** (A) comprises at least one hydrophobic apolar moiety and a hydrophilic polar **head** group, and a polymer of specific formula or monomeric precursor having nitrogen (N) and carbon (C) terminal end groups.

The polymer is a poly-(amino acid), poly-(amino acid derivative) or a poly-(amino acid) analog.

The lipid is attached to N or C terminal of the polymer.

DETAILED DESCRIPTION - A lipid polymer **conjugate** comprises at least one hydrophobic apolar moiety and a hydrophilic polar **head group**, and a polymer of formula -(NHCHR(CH<sub>2</sub>)<sub>m</sub>CO)<sub>n</sub>- (I) or monomeric precursor having nitrogen (N) and carbon (C) terminal end groups.

The polymer is a poly-(amino acid), poly-(amino acid derivative) or a poly-(amino acid) analog.

The lipid is attached to N or C terminal of the polymer.

The lipid polymer is obtainable from an amphiphilic lipid.

R = H, -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>OR<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>CO-NH<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>-NH-CO-R<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>-SO<sub>y</sub>CH<sub>3</sub>, OR-(CH<sub>2</sub>)<sub>x</sub>COOH;

R<sub>1</sub> = hydrogen or 1-4C alkyl optionally substituted with one or more hydroxy groups or one di 1-4C alkylamine group;

x = 0-4;

m = 1 or 0; and

y = 1 or 2.

USE - (A) are used for inclusion into a colloidal carrier composition e.g. vesicular **bilayer** systems, such as liposomes, niosomes and reversed vesicles, micellar systems, nanocapsules and nanospheres and for use in therapy, diagnosis and prophylaxis.

ADVANTAGE - The polymer lipid conjugates (A) exhibits ability to reduce zeta potential, thus demonstrates the polymer grafting shielded the surface charge. The polymer lipid conjugates are biodegradable and hence provide no risk of accumulation in cells of animal or human body. (A) exhibits reduced lipid dose dependency. An increased clearance after second injection of the lipid polymer conjugate composition is not observed and the reduction in blood circulation time is moderate.

DESCRIPTION OF DRAWING(S) - The figure shows a graph showing the mean values for the calculated percentage injected dose in blood samples versus time for polyethylene glycol-poly(2-hydroxyethyl)-L-asparagine containing liposomal preparation having different amount of total lipid.

Dwg.1/6

L15 ANSWER 13 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2002-434879 [46] WPIDS  
DOC. NO. NON-CPI: N2002-342354  
DOC. NO. CPI: C2002-123416  
TITLE: Biocompatible material useful for e.g. controlling cellular growth comprises at least two component surface.  
DERWENT CLASS: A18 A23 A25 A96 B04 B07 D16 D22 P34  
INVENTOR(S): ALTANKOV, G; JANKOVA, K; JONSSON, G; THOM, V; ULRICH, M  
PATENT ASSIGNEE(S): (SURF-N) SURFARC APS; (BIOS-N) BIOSURE APS; (ALTA-I) ALTANKOV G; (JANK-I) JANKOVA K; (JONS-I) JONSSON G; (THOM-I) THOM V; (ULBR-I) ULRICH M  
COUNTRY COUNT: 98  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002015955	A2	20020228 (200246)*	EN	217	
	RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW			
	W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW			
AU 2001081758	A	20020304 (200247)			
EP 1326655	A2	20030716 (200347)	EN		
	R:	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR			
US 2005053642	A1	20050310 (200519)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002015955	A2	WO 2001-DK557	20010823
AU 2001081758	A	AU 2001-81758	20010823
EP 1326655	A2	EP 2001-960202	20010823
		WO 2001-DK557	20010823
US 2005053642	A1	WO 2001-DK557	20010823
		US 2003-362677	20030815

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001081758	A Based on	WO 2002015955
EP 1326655	A2 Based on	WO 2002015955

PRIORITY APPLN. INFO: DK 2000-1250 20000823  
 AN 2002-434879 [46] WPIDS  
 AB WO 200215955 A UPAB: 20040408  
 NOVELTY - Biocompatible material comprises a surface comprising at least two components such as a hydrophobic substratum and a macromolecule of hydrophobic nature.

DETAILED DESCRIPTION - Biocompatible material comprises a substratum (A) contacted by at least one macro-molecule. The material has a first advancing contact angle (a). (A) has a second advancing contacting angle b0 when not contacted by a macromolecule and another second advancing contact angle bsat, when the substratum is saturated by the macromolecules. The advancing contact angles are measured using water and air saturated by water vapor. The bsat does not change when the substratum is contacted by further macromolecules by a chemical bond. The relation between the advancing contact angles is  $R = (b0 - a)/(b0 - bsat)$  where R is 0 - less than 0.4.

INDEPENDENT CLAIMS are included for the following:

- (1) use of the material in the manufacture of an implantable organ or its part; and
- (2) producing the material by:
  - (i) contacting the substratum having a second contact angle with a composition comprising several macromolecules; and
  - (ii) providing a biocompatible material comprising a substratum contacted by several macromolecules.

ACTIVITY - Antiinfertility.

MECHANISM OF ACTION - None given.

USE - For controlling cellular growth, cellular proliferation, and/or cellular differentiation; separating and/or isolating biological material; producing a biohybrid organ; diagnosis or carrying out therapy, carrying out surgery of human or animal or their parts; as a carrier for in vivo delivery of a medicament to a human or animal body (claimed); as cell culture dishes, bioreactors, implants, biohybrid organs e.g. pacemaker etc.; to create bio-compatible surfaces suitable for use in emerging technologies e.g. the construction and application of the surface architectures of biomaterials with innovative functionalities such as bioartificial pancreas, liver or kidney; to improve the implantation rates after in vitro fertilization; to treat and/or prevent infertility or early pregnancy loss; to provide a container capable of mimicking an endomaterial environment of a female uterus; to enhance fertility potential of animal oocytes e.g. sports, zoo, pet and farm animals; in a dialysis **membrane**; for making tissue engineered constructs, valves and vessels; to provide polymer-based drug release systems e.g. systems based on implantable materials; for bone reconstruction with tissue engineering vascularized bone; for engineering composite bone and

cartilage; to increase the mechanical strength and liability of e.g. heart valve leaflets and other engineered tissues; for growing vertebrate cells e.g. human cells including human skin cells; in skin grafting.

ADVANTAGE - (A) in cooperation with the macromolecule maintains, improves and/or stabilizes the biologically active form or its conformation. The biologically active compound improves contact between the material and a biological entity e.g. biological cell or virus or their parts, including a polypeptide or its part, nucleic acid, carbohydrate and/or lipid. The material does not induce an acute or chronic inflammatory response and does not prevent a proper differentiation of implant surrounding tissue. The method is simple and inexpensive. The surfaces can be used as cell culture dishes, bioreactors, implants etc. without the need of extensive development of new polymers and biocompatibility screening, ensures spatial separation of e.g. xenogenic and/or allogenic cells from the host immune system. The method increases the rate of maturation of immature oocytes and potential of fertilization of oocytes, minimizes incubation-time, and improves the quality of incubated oocytes. The degree of modification resulting from macromolecule including PEG attachment does not reduce the permeability of the membranes, thus suitable for the application as haemodialysis membrane. The tissue engineered constructs have improved mechanical strength and flexibility while retains biocompatible properties of the material. The valves and vessels withstand repeated stress and stirring.

Dwg.0/31

L15 ANSWER 14 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-514501 [56] WPIDS  
DOC. NO. CPI: C2001-153732  
TITLE: Composition comprising a combination of an oxidizing and/or reducing agent, a protein-denaturing agent, and a hapten, useful for treating neoplasms, tumors, and cancers.  
DERWENT CLASS: B05 D16  
INVENTOR(S): YU, B  
PATENT ASSIGNEE(S): (YUBB-I) YU B  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001052868	A1	20010726 (200156)*	EN	83	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW				
AU 2001030977	A	20010731 (200171)			
US 2002044919	A1	20020418 (200228)			
CN 1431909	A	20030723 (200365)			
JP 2004505009	W	20040219 (200414)		223	
US 6811788	B2	20041102 (200472)			
US 2005118187	A1	20050602 (200537)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001052868	A1	WO 2001-US1737	20010118
AU 2001030977	A	AU 2001-30977	20010118
US 2002044919	A1 Provisional	US 2000-177024P	20000119

CN 1431909	A	US 2001-765060	20010117
JP 2004505009	W	CN 2001-806830	20010118
		JP 2001-552915	20010118
		WO 2001-US1737	20010118
US 6811788	B2 Provisional	US 2000-177024P	20000119
		US 2001-765060	20010117
US 2005118187	A1 Provisional CIP of	US 2000-177024P US 2001-765060 US 2004-973798	20000119 20010117 20041025

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030977	A Based on	WO 2001052868
JP 2004505009	W Based on	WO 2001052868
US 2005118187	A1 CIP of	US 6811788

PRIORITY APPLN. INFO: US 2000-177024P 20000119; US  
2001-765060 20010117; US  
2004-973798 20041025

AN 2001-514501 [56] WPIDS

AB WO 200152868 A UPAB: 20011001

NOVELTY - A composition (I) comprising a combination of an oxidizing or reducing agent, a protein-denaturing agent, and a hapten, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a kit comprising the combination (I);
- (2) an article of manufacture comprising:
  - (a) packaging material;
  - (b) the combination above; and
  - (c) a label indicating that the article is for treating neoplasms; and
- (3) a method for treating neoplasm in a mammal comprising in situ administration to the neoplasm of a mammal, a hapten and a coagulation agent or treatment that causes coagulation of the neoplasm (an autologous immune response is generated against the neoplasm).

ACTIVITY - Cytostatic.

31 advanced stage IV liver cancer patients were treated using the new combination. Prior to procedure, patients were given a mild sedative or painkiller. Patients were calmed thoroughly and were also monitored by modern medial imaging. With local anesthesia, percutaneous puncture was administered directly into the tumor using a spinal needle connected to a high-power syringe containing a combination of ethanol, H2O2, anticancer drug AraC (8 mg/ml) and hemotoxin (5 mg/ml). Combination was injected directly into the tumor and distributed throughout the matrix of the whole tumor. Sonic imaging showed the stranger echo imaging which indicated the coagulation area.

Following coagulation lysis and tumor cell death monitored by sonic imaging, which showed liquefied echo, tumor started to shrink and disappear. Normal tissues grew replacing the tumor. The process was monitored by medical imaging systems. The amount of the ingredients of the combination injected into the tumor was determined by the diameter of tumors (cm) with 2 ml of the combination for each centimeter.

Procedure was repeated in 1-2 weeks. On average, each patient was treated with the injection for 3 times. No severe side effects for all the treated patients was observed, although some patients experienced tolerable pain the injection site while a few had light fever during the first week. All side effects disappeared in about 1 week. No serious complications happened in any cases.

MECHANISM OF ACTION - Gene therapy.

USE - The combination and the methods are useful for treating

neoplasms, tumors, and cancers, including neoplasm or cancer of the e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, endometrium, esophagus, eye, eyelids, fallopian tube, gastrointestinal tract, head and neck, heart, kidney, larynx, liver, lung, or mandible.

The combination and methods may further be used in treating tumors of mesenchymal origin (e.g. connective tissue and derivatives, or endothelial and related tissues blood vessels), epithelial origin (stratified squamous carcinoma, or basal cells of skin or adenexa), and tumors derived from more than one neoplastic cell types derived from more than one germ layers.

The treatment may be used with radiation therapy, before surgery for the pre-treatment of neoplasm for easier removal of the neoplastic mass and reduces the neoplasm metastasis rate, or with gene therapy.

Dwg.0/4

L15 ANSWER 15 OF 38 MEDLINE on STN  
ACCESSION NUMBER: 2001673979 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11718771  
TITLE: Orienting otolith-ocular reflexes in the rabbit during static and dynamic tilts and off-vertical axis rotation.  
AUTHOR: Maruta J; Simpson J I; Raphan T; Cohen B  
CORPORATE SOURCE: Departments of Neurology and Physiology and Biophysics, Mount Sinai School of Medicine, 1 East 100th Street, Box 1135, New York, NY 10029, USA.  
SOURCE: Vision research, (2001) 41 (25-26) 3255-70.  
Journal code: 0417402. ISSN: 0042-6989.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals; Space Life Sciences  
ENTRY MONTH: 200203  
ENTRY DATE: Entered STN: 20011126  
Last Updated on STN: 20020413  
Entered Medline: 20020311

AB Orienting otolith-ocular reflexes were assessed in rabbits using static tilt, off-vertical axis rotation (OVAR) and sinusoidal oscillation about earth-horizontal axes. In all paradigms, **head** pitch produced ocular counter-pitch and vergence, and **head** roll produced ocular counter-roll and **conjugate** yaw version. Thus, vergence and version are essential components of orienting reflexes along the naso-occipital and bitemporal axes. Vergence and version caused misalignment between the axes of eye and head movement during pitch and roll head movements. Semicircular canal input broadened the band-pass of these orienting reflexes, which would make them more appropriate when compensating for head movement during active motion.

L15 ANSWER 17 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2000-071650 [06] WPIDS  
CROSS REFERENCE: 1996-393530 [39]; 1997-393702 [36]; 1998-145264 [13];  
1998-457256 [39]; 1998-495982 [42]; 1999-204741 [17];  
2000-147218 [13]; 2001-225814 [23]; 2002-089133 [12];  
2002-105080 [14]  
DOC. NO. CPI: C2000-020448  
TITLE: Polymeric assay film for direct colorimetric detection of small molecules such as pathogens.  
DERWENT CLASS: A89 B04 D16 J04  
INVENTOR(S): CHARYCH, D; NAGY, J; SPEVAK, W  
PATENT ASSIGNEE(S): (REGC) UNIV CALIFORNIA  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6001556	A	19991214	(200006)*		20

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6001556	A	CIP of	US 1992-976697
		CIP of	US 1992-982189
		Cont of	US 1993-159927
			US 1996-592724
			19921113
			19921125
			19931130
			19960126

PRIORITY APPLN. INFO: US 1993-159927 19931130; US  
                                   1992-976697 19921113; US  
                                   1992-982189 19921125; US  
                                   1996-592724 19960126

AN 2000-071650 [06] WPIDS

CR 1996-393530 [39]; 1997-393702 [36]; 1998-145264 [13]; 1998-457256 [39];  
   1998-495982 [42]; 1999-204741 [17]; 2000-147218 [13]; 2001-225814 [23];  
   2002-089133 [12]; 2002-105080 [14]

AB US 6001556 A UPAB: 20040928

NOVELTY - Polymeric assay films for direct colorimetric detection tests of small molecules, are new.

DETAILED DESCRIPTION - A polymerized **bilayer** film (I) comprises:

- (1) a conjugated polymer backbone (comprising a number of polymerized diacetylene monomers);
- (2) linker groups (which are covalently conjugated to the polymer backbone);
- (3) ligands (either sialic acid and/or carbohydrates with ordering heads groups covalently conjugated to the linker groups) with direct affinity for an analyte; and
- (4) a support structure.

The ordering **head** groups are bound to the surface of the **conjugated** polymer backbone in positions not occupied by the linker groups. The polymerized **bilayer** film undergoes a detectable color change upon binding of the analyte to the ligands.

INDEPENDENT CLAIMS are also included for the following:

- (1) a method (II) of producing (I), comprising:
    - (a) providing:
      - (i) ligands (carbohydrates) with a direct affinity for an analyte;
      - (ii) linker groups with 2 terminal ends;
      - (iii) lipid monomers;
      - (iv) lipid monomers comprising ordering head groups; and
      - (v) a support surface;
    - (b) attaching the ligands to the lipid monomers so that the ligands are attached to one end of the linkers and the lipid monomers are attached to the other (to produce monomer-linear structural unit-ligand groups);
    - (c) mixing the monomer-linear structural unit-ligand groups with lipid monomers comprising ordering heads;
    - (d) spreading the mixture from step (c) on the support to form a **bilayer** film; and
    - (e) polymerizing the **bilayer** film (to form the polymerized **bilayer** film (I)); and
  - (2) a method for detecting an analyte, comprising contacting (I) with a sample thought to contain the analyte and detecting a color change in (I) (a color change is indicative of the presence of the analyte).
- USE - (I) may be used for the direct detection of small molecules such as pathogens (e.g. influenza viruses, herpes virus, human immunodeficiency virus (HIV), coronavirus, encephalomyelitis, chlamydia,

rotavirus, polyomavirus, Streptococcus, Salmonella, sendai virus, mumps virus, Newcastle Disease virus, myxovirus, Escherichia coli, encephalomyocarditis virus and Plasmodium (claimed)). Other substances such as industrial materials, enzymes, hormones, cell wall fragments, blood components, disease indicators, cell components, antibodies, lectins and genetic material may also be detected using (I).

(I) also has application in feedstock and effluent monitoring, drug development and other types of medical testing.

ADVANTAGE - The use of (I) is easily automated, especially if a spectrometer is used to detect color changes. A multiple well system may be produced from (I) which allows inexpensive screening and sequential testing for analytes. (I) represents a new approach to the direct detection of a material using color changes in a monomolecular film which occurs when specifically bound to the target molecule. (I) is simple and inexpensive to produce.

(I) provides the advantages of both an immunoassay and chemical analysis in a single system. It has the inherent direct assay advantages of analytical chemistry methods and has a substantial environmental range of testing beyond that of immunoassays. This allows accommodation of various analytes in their most advantageous environmental parameters. Additionally, (I) allows rigorous direct analysis to occur even in very narrow environmental ranges, previously unavailable with analytical chemical techniques. The speed and simplicity of the color change indicator of (I) are its hallmark advantages.

Dwg.0/6

L15 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:243267 CAPLUS

DOCUMENT NUMBER: 131:15441

TITLE: Effect of PEG-lipid conjugates on the phase behavior of phosphatidylethanolamine dispersions

AUTHOR(S): Koynova, R.; Tenchov, B.; Rapp, G.

CORPORATE SOURCE: Institute of Biophysics, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.

SOURCE: Colloids and Surfaces, A: Physicochemical and Engineering Aspects (1999), 149(1-3), 571-575

CODEN: CPEAEH; ISSN: 0927-7757

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The phase behavior of binary mixts. of hydrated dielaidoylphosphatidylethanolamine (DEPE) with two different PEG-lipid conjugates at a molar fraction below 0.2 has been studied by using time-resolved X-ray diffraction, and partial phase diagrams have been constructed. The studied **conjugates** comprise two saturated hydrocarbon acyl chains 14 carbon atoms long and PEG550 or PEG5000 chains covalently attached to a phosphoethanolamine polar **head** group, DMPE(PEG550) and DMPE(PEG5000), resp. When added in small amts. (10-20 mol%) to DEPE aqueous dispersions, both PEG-lipids favor the lamellar liquid crystalline (L $\alpha$ ) phase at the expense of the lamellar gel (L $\beta$ ) and the inverted hexagonal (HII) phases. One of the conjugates, DMPE(PEG550), shifts the L $\alpha$ -HII transition of DEPE to higher temps. by 2.5°C per mol% PEG-lipid, and induces the spontaneous formation of a cubic phase of space group Im3m in the DEPE dispersions. The cubic phase intrudes between the lamellar liquid crystalline and the inverted hexagonal

phases in the DEPE/DMPE(PEG550) phase diagram. Low amts. of the DMPE(PEG5000) conjugate only shift the L $\alpha$ -HII transition of DEPE to higher temps., at 5.2°C per mol% PEG-lipid, but does not promote the formation of addnl. phases. The resp. slopes for the L $\beta$ -L $\alpha$ , transition temperature depression are 10-15 times smaller. At > 15 mol% DMPE(PEG550) and at > 5 mol% DMPE(PEG5000), the non-lamellar

phases are eliminated from the phase diagrams. Structural data on the organization of the pure hydrated PEG-lipid conjugates are also provided, suggesting that these lipids form micelles and lamellae.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1998:471436 CAPLUS  
DOCUMENT NUMBER: 129:78811  
TITLE: Receptor membranes.  
INVENTOR(S): Cornell, Bruce Andrew; Braach-maksvytis, Vijolrta  
Lucija Brinislava  
PATENT ASSIGNEE(S): Australian Membrane and Biotechnology Research  
Institute, Australia  
SOURCE: U.S., 14 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5766960	A	19980616	US 1995-449895	19950523
US 5436170	A	19950725	US 1990-473932	19900125
US 5693477	A	19971202	US 1995-447569	19950523
US 5741712	A	19980421	US 1995-448178	19950523
PRIORITY APPLN. INFO.:			AU 1987-3346	A 19870727
			AU 1987-3348	A 19870727
			AU 1987-3453	A 19870731
			AU 1987-4478	A 19870921
			US 1990-473932	A 19900125
			WO 1988-AU273	W 19880727

AB A **membrane** comprising a closely packed array of self-assembling amphiphilic mols., and is characterized in that it incorporates a plurality of ion channels, and/or at least a proportion of the self-assembling mols. comprise a receptor mol. conjugated with a supporting entity. The ion channel is selected from the group consisting of peptides capable of forming helixes and aggregates thereof, coronands, cryptands, podands and combinations thereof. In the amphiphilic mols. comprising a receptor mol. **conjugated** with a supporting entity, the receptor mol. has a receptor site and is selected from the group consisting of Igs, antibodies, antibody fragments, dyes, enzymes and lectins. "The supporting entity is selected from the group consisting of a lipid **head** group, a hydrocarbon chain(s), a cross-linkable mol. and a **membrane** protein. The supporting entity is attached to the receptor mol. at an end remote from the receptor site. In preferred embodiments the ion channel is gramicidin A, and is preferable gated. Such membranes may be used in the formation of sensing devices.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 25 OF 38 MEDLINE on STN DUPLICATE 7  
ACCESSION NUMBER: 93229518 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8471621  
TITLE: Lipid-amphotericin B complex structure in solution: a possible first step in the aggregation process in cell membranes.  
AUTHOR: Balakrishnan A R; Easwaran K R  
CORPORATE SOURCE: Molecular Biophysics Unit, Indian Institute of Science, Bangalore.  
SOURCE: Biochemistry, (1993 Apr 20) 32 (15) 4139-44.

Journal code: 0370623. ISSN: 0006-2960.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199305  
ENTRY DATE: Entered STN: 19930604  
Last Updated on STN: 19930604  
Entered Medline: 19930517

AB The interactions between the polyene antibiotic amphotericin B with dipalmitoylphosphatidylcholine were investigated in vesicles (using circular dichroism) and in chloroform solution (using circular dichroism and <sup>1</sup>H, <sup>13</sup>C, and <sup>31</sup>P nuclear magnetic resonance). The results show that amphotericin B readily aggregates in vesicles and that the extent of aggregation depends on the lipid:drug concentration ratio. Introduction of sterol molecules into the **membrane** hastens the process of aggregation of amphotericin B. In chloroform solutions amphotericin B strongly interacts with phospholipid molecules to form a stoichiometric complex. The results suggest that there are interactions between the **conjugated** heptene stretch of amphotericin B and the methylene groups of lipid acyl chains, while the sugar moiety interacts with the phosphate **head** group by the formation of a hydrogen bond. A model is proposed for the lipid-amphotericin B complex, in which amphotericin B interacts equally well with the two lipid acyl chains, forming a 1:1 complex.

L15 ANSWER 27 OF 38 MEDLINE on STN DUPLICATE 8  
ACCESSION NUMBER: 93123198 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 1478927  
TITLE: Induction of vesicle-to-micelle transition by bile salts for DOPE vesicles incorporating immunoglobulin G.  
AUTHOR: Lee E O; Kim J G; Kim J D  
CORPORATE SOURCE: Department of Chemical Engineering and Bioprocess ERC, Korea Advanced Institute of Science and Technology, Taejon.  
SOURCE: Journal of biochemistry, (1992 Nov) 112 (5) 671-6.  
Journal code: 0376600. ISSN: 0021-924X.  
PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199302  
ENTRY DATE: Entered STN: 19930226  
Last Updated on STN: 19930226  
Entered Medline: 19930208

AB The vesicle-to-micelle transition of immunoliposomes formed by dioleoylphosphatidyl-ethanolamine (DOPE) and palmitoyl-immunoglobulin G (p-IgG) was investigated in the presence of bile salts and conjugated bile salts. Turbidity and the release of calcein from liposomes were measured as a function of the amount of bile salts added and compared with the solubilizing profiles of the salts according to the number and configurational state of hydroxy groups in the cholate. The solubilizing phenomena by bile salts conjugated with glycine or taurine were investigated in comparison with non-conjugated bile salts. The solubilizing effect of bile salts on the **bilayer** of immunoliposomes increased remarkably with the number of hydroxy groups, but was not influenced by the configurational state of the hydroxy group. The half-maximal concentration of bile salts, defined as the concentration giving the half-maximum turbidity of liposome solutions, decreased with hydrophobicity in the phosphatidylcholine (PC) **bilayer**. The increase in the hydrophobicity of bile salts induces the ability to permeabilize and solubilize phospholipid vesicles. In the case of PC or PE liposome bilayers with inserted protein, bile salts conjugated with

taurine or glycine had lower hydrophobicity than non-conjugated bile salts and showed a lower half-maximal concentration. The **conjugated** bile salts are believed to interact with lipids and solubilize the bilayers, while the **head** groups of bile salts interact with the inserted protein and extract it from the lipid **bilayer**.

L15 ANSWER 28 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 1989-061259 [08] WPIDS  
 DOC. NO. NON-CPI: N1989-046623  
 DOC. NO. CPI: C1989-027144  
 TITLE: Receptor **membrane** for bio-sensors - comprising  
 a closely packed array of self-assembling amphiphilic  
 molecules having ion channels and/or receptor molecules.  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): BRAACH-MAKSVYTIS, V L B; CORNELL, B A; BRAACH-MAKSVYTIS, V L; BRAACHMAKS, V L B; BRAACH-MAKSVYTIS, V  
 PATENT ASSIGNEE(S): (CSIR) COMMONWEALTH SCI & IND RES ORG; (AUME-N) AUSTRALIA  
 MEMBRANE & BIOTECHNOLOGY RES INST; (AUME-N) AUSTRALIAN  
 MEMBRANE & BIOTECHNOLOGY INST  
 COUNTRY COUNT: 15  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 8901159	A	19890209 (198908)*	EN	40	
RW: AT BE CH DE FR GB IT LI LU NL SE					
W: AU JP US					
AU 8821279	A	19890301 (198923)			
EP 382736	A	19900822 (199034)			
R: AT BE CH DE FR GB IT LI LU NL SE					
JP 03503209	W	19910718 (199135)			
EP 382736	B1	19941102 (199442)	EN	24	
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 3852036	G	19941208 (199503)			
EP 382736	A4	19901205 (199514)			
CA 1335879	C	19950613 (199531)			
US 5436170	A	19950725 (199535)		15	
JP 2682859	B2	19971126 (199801)		14	
US 5693477	A	19971202 (199803)		13	
US 5741712	A	19980421 (199823)		13	
US 5766960	A	19980616 (199831)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8901159	A	WO 1988-AU273	19880727
EP 382736	A	EP 1988-907164	19880727
JP 03503209	W	JP 1988-506329	19880727
EP 382736	B1	EP 1988-907164	19880727
		WO 1988-AU273	19880727
DE 3852036	G	DE 1988-3852036	19880727
		EP 1988-907164	19880727
		WO 1988-AU273	19880727
EP 382736	A4	EP 1988-907164	
CA 1335879	C	CA 1988-573217	19880727
US 5436170	A	WO 1988-AU273	19880727
		US 1990-473932	19900125
JP 2682859	B2	JP 1988-506329	19880727
		WO 1988-AU273	19880727
US 5693477	A Cont of	US 1990-473932	19900125
		US 1995-447569	19950523

US 5741712	A Div ex	US 1990-473932	19900125
US 5766960	A CIP of	US 1995-448178	19950523
		US 1990-473932	19900125
		US 1995-449895	19950523

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 382736	B1 Based on	WO 8901159
DE 3852036	G Based on	EP 382736
	Based on	WO 8901159
US 5436170	A Based on	WO 8901159
JP 2682859	B2 Previous Publ.	JP 03503209
	Based on	WO 8901159
US 5693477	A Cont of	US 5436170
US 5741712	A Div ex	US 5436170
US 5766960	A CIP of	US 5436170

PRIORITY APPLN. INFO: AU 1987-4478 19870921; AU  
                                   1987-3346 19870727; AU  
                                   1987-3348 19870727; AU  
                                   1988-21279 19870728; AU  
                                   1987-3453 19870731

AN 1989-061259 [08] WPIDS

AB WO 8901159 A UPAB: 19960520

A **membrane** comprising a closely packed array of self-assembling amphiphilic molecules is claimed characterised in that (1) the **membrane** includes ion channels selected from peptides capable of forming helices and aggregates, podands, coronands, cryptands and combinations and/or (2) at least a proportion of the self-assembling amphiphilic molecules comprise a receptor molecule **conjugated** with a supporting entity, the receptor molecule having a receptor site and being selected from immunoglobulins, antibodies, antibody fragments, dyes, enzymes and lectins, the supporting entity being selected from a lipid **head** gp., a hydrocarbon chain, a cross-linkable molecule and a **membrane** protein, the supporting entity being **conjugated** with the receptor molecule at an end remote from the receptor site.

Pref. the ion channels are gramicidin or analogues. Also claimed is a biosensor comprising a **membrane bilayer** attached to a solid surface, the **bilayer** having an upper and lower layer, the lower layer being adjacent the solid surface and being provided with gps. reactive with the solid surface or with gps. provided on this, each layer of the **bilayer** being composed of self-assembling amphiphilic molecules and gramicidin monomers, and where a receptor moiety is attached to the gramicidin monomers in the upper layer. The solid surface is pref. a palladium-coated glass electrode.

USE/ADVANTAGE - The membranes are used partic. for the production of biosensors. They have a high density of receptor sites and serve as highly selective binding surfaces to which molecular species to be detected will bind.

0/6

Dwg.0/6

ABEQ EP 382736 B UPAB: 19941212

A **membrane** bound to a solid non-porous surface, the **membrane** comprising a closely packed array of self-assembling amphiphilic molecules and characterised in that:

(1) the **membrane** includes a plurality of ion channels which are peptides capable of forming helices and aggregates thereof, a podand, coronand, cryptand or a combination thereof; and

(2) at least a proportion of the self-assembling amphiphilic molecules comprise a receptor molecule conjugated with a supporting

entity, the receptor molecule having a receptor site and being an immunoglobulin, antibody, antibody fragment, dye, enzyme or lectin; the supporting entity being a lipid **head** group, a hydrocarbon chain(s), a cross-linkable molecule or a **membrane** protein and being **conjugated** with the receptor molecule at an end remote from the receptor site.

Dwg.0/6

ABEQ US 5436170 A UPAB: 19950905

**Membrane** comprises a closely packed array of self-assembling amphiphilic molecules, e.g. peptides that form helices and/or aggregates, such that numerous ion channels are present in the structure and at least part of the structure comprises a receptor (e.g. immunoglobulin, antibody or its active binding fragment, enzyme or lectin) conjugated with a hydrocarbon chain or **membrane** protein at a location remote from the receptor's active site.

USE - The prods. are components of selective biosensors.

ADVANTAGE - The **membrane** is mounted on a solid supporting surface to provide robustness and avoid fragility.

Dwg.0/6

ABEQ US 5693477 A UPAB: 19980119

A **membrane** comprising a closely packed array of self-assembling amphiphilic molecules is claimed characterised in that (1) the **membrane** includes ion channels selected from peptides capable of forming helices and aggregates, podands, coronands, cryptands and combinations and/or (2) at least a proportion of the self-assembling amphiphilic molecules comprise a receptor molecule **conjugated** with a supporting entity, the receptor molecule having a receptor site and being selected from immunoglobulins, antibodies, antibody fragments, dyes, enzymes and lectins, the supporting entity being selected from a lipid **head** gp., a hydrocarbon chain, a cross-linkable molecule and a **membrane** protein, the supporting entity being **conjugated** with the receptor molecule at an end remote from the receptor site.

Pref. the ion channels are gramicidin or analogues. Also claimed is a biosensor comprising a **membrane bilayer** attached to a solid surface, the **bilayer** having an upper and lower layer, the lower layer being adjacent the solid surface and being provided with gps. reactive with the solid surface or with gps. provided on this, each layer of the **bilayer** being composed of self-assembling amphiphilic molecules and gramicidin monomers, and where a receptor moiety is attached to the gramicidin monomers in the upper layer. The solid surface is pref. a palladium-coated glass electrode.

USE/ADVANTAGE - The membranes are used partic. for the prodn. of biosensors. They have a high density of receptor sites and serve as highly selective binding surfaces to which molecular species to be detected will bind.

Dwg.3/6

L15 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:109884 CAPLUS

DOCUMENT NUMBER: 108:109884

TITLE: Differential localization of glycoconjugates having affinity for concanavalin A on the surface of the sperm head in the testis, the epididymis, and the ejaculate of the ram

AUTHOR(S): Delpech, S.; Hamamah, S.; Pisselet, C.; Courot, M.

CORPORATE SOURCE: INRA, Nouzilly, 37380, Fr.

SOURCE: Journal of Experimental Zoology (1988), 245(1), 59-62

CODEN: JEZOAO; ISSN: 0022-104X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The location of Con A receptors on the surface of the head of ram spermatozoa originating from the rete testis, from 3 regions of the

epididymis, or from the ejaculate was investigated by using a Au-Con A labeling technique. Electron microscopic observation revealed 3 major localizations, each being characteristic of the origin of the spermatozoa: periacrosomal in the rete testis, postacrosomal in the epididymis, on the entire surface of the sperm head in the ejaculate.

L15 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1987:419734 CAPLUS  
DOCUMENT NUMBER: 107:19734  
TITLE: pH-dependent stability and fusion of liposomes combining protonatable double-chain amphiphiles with phosphatidylethanolamine  
AUTHOR(S): Leventis, Rania; Diacovo, Thomas; Silvius, John R.  
CORPORATE SOURCE: Dep. Biochem., McGill Univ., Montreal, QC, H3G 1Y6, Can.  
SOURCE: Biochemistry (1987), 26(12), 3267-76  
CODEN: BICHAW; ISSN: 0006-2960  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A series of novel double-chain amphiphiles with protonatable head groups were prepared including acylated derivs. of various 2-substituted palmitic acids, amino acid **conjugates** of these species, and 1,2-dioleoyl-3-succinylglycerol. These species can be combined with phosphatidylethanolamine (PE) to prepare reverse-phase evaporation vesicles that are stable and trap hydrophilic solutes at pH 7. At weakly acidic pH values ( $\leq 6.5$ , depending on the titratable amphiphilic component), these pH-sensitive vesicles exhibit fusion, with a limited extent of contents mixing and extensive mixing of lipids, accompanied by leakage of aqueous contents. Protons and divalent cations show strong synergistic effects in promoting mixing of both lipids and aqueous contents between pH-sensitive vesicles prepared with any of a variety of double-chain titratable amphiphiles. Calorimetric results indicate that the relative stabilities of different types of pH-sensitive liposomes at low pH cannot be simply correlated with the propensity of the lipids to form a hexagonal II phase under these conditions. Fluorescence measurements demonstrate that single-chain fatty acids, but not double-chain titratable amphiphiles such as N-acyl-2-aminopalmitic acids, are rapidly removed from pH-sensitive vesicles in the presence of other lipid vesicles, serum albumin, or serum. Addnl., pH-sensitive liposomes containing double-chain titratable amphiphiles retain their aqueous contents better than do those containing single-chain amphiphiles in the presence of lipid membranes or albumin. Surprisingly, however, pH-sensitive vesicles of either type show retention of contents in the presence of serum that is comparable to that observed with vesicles composed purely of phospholipids. A model is proposed to explain these latter findings.

L15 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1986:84801 CAPLUS  
DOCUMENT NUMBER: 104:84801  
TITLE: Identifying regions of **membrane** proteins in contact with phospholipid head groups: covalent attachment of a new class of aldehyde lipid labels to cytochrome c oxidase  
AUTHOR(S): McMillen, Debra A.; Volwerk, Johannes J.; Ohishi, Junichi; Erion, Mark; Keana, John F. W.; Jost, Patricia C.; Griffith, O. Hayes  
CORPORATE SOURCE: Inst. Mol. Biol., Univ. Oregon, Eugene, OR, 97403, USA  
SOURCE: Biochemistry (1986), 25(1), 182-93  
CODEN: BICHAW; ISSN: 0006-2960  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A series of amine-specific reagents based on the benzaldehyde reactive group have been synthesized, characterized, and used to study beef heart cytochrome c oxidase reconstituted in phospholipid bilayers. The series contained 3 classes of reagents, lipid-soluble phosphodiesters having a single hydrocarbon chain, phospholipid analogs, and a water-soluble benzaldehyde. All reagents were either radiolabeled or spin-labeled or both. The Schiff bases formed by these benzaldehydes with amines were reversible until the addition of the reducing agent Na cyanoborohydride, whereas attachment of lipid-derived aliphatic aldehydes was not readily reversible in the absence of the reducing agent. The benzaldehyde group provides a convenient method of controlling and delaying permanent attachment to integral **membrane** proteins until after the reconstitution steps. This ensures that the lipid analogs are located properly to identify amine groups at the lipid-protein interface rather than reacting indiscriminately with amines of the hydrophilic domains of the protein. The benzaldehyde lipid labels attached to cytochrome c oxidase with high efficiency. Typically, 20% of the amount of lipid label present was covalently attached to the protein, and the number of moles of label incorporated per mol of protein ranged 1-6, depending on the molar ratios of label, lipid, and protein. The efficiency of labeling by the water-soluble benzaldehyde was much less than that observed for any of the lipid labels because of dilution effects, but equivalent levels of incorporation were achieved by increasing the label concentration ESR spectra of a nitroxide-containing phospholipid analog covalently attached to reconstituted cytochrome c oxidase exhibited a large motion-restricted component, which is characteristic of spin-labeled lipids in contact with the hydrophobic surfaces of **membrane** proteins. The line shape and splittings were similar for covalently attached label and label free to diffuse and contact the protein mols. in the **bilayer**, providing independent evidence that the coupling occurs at the protein-lipid interface. The distribution of the benzaldehyde reagents attached to the polypeptide components of cytochrome c oxidase was examined by SDS polyacrylamide gel electrophoresis. The labeling pattern observed for the lipid analogs was not affected by the presence of the nitroxide moiety on the acyl chains but was dependent on the molar ratio of labeling reagent to protein. With the lipid labels, band VII was the most heavily labeled, and significant labeling of bands III, V, and VI was observed at higher labeling ratios. There was little or no labeling of bands I, II, and IV. A different labeling pattern was observed with the water-soluble label, providing addnl. evidence that the lipid-like benzaldehyde reagents react with cytochrome c oxidase from the confines of the **bilayer**. Thus, these new labels have the necessary specificity and reactivity to be useful in correlating sequence data with the structure and function of integral **membrane** proteins, particularly in identifying regions in contact with phospholipid head groups at the lamellar interface.

L15 ANSWER 36 OF 38 MEDLINE on STN DUPLICATE 10  
ACCESSION NUMBER: 82182979 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 6176271  
TITLE: A novel approach for the topographical localization of glycolipids on the cell surface.  
AUTHOR: Spiegel S; Skutelsky E; Bayer E A; Wilchek M  
CONTRACT NUMBER: F32-ES5120 (NIEHS)  
SOURCE: Biochimica et biophysica acta, (1982 Apr 23) 687 (1) 27-34.  
Journal code: 0217513. ISSN: 0006-3002.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198207

ENTRY DATE: Entered STN: 19900317  
Last Updated on STN: 19970203  
Entered Medline: 19820719

AB In this study we have developed a prototype system for distinguishing between the topographical distribution of glycolipids versus glycoproteins on the ultrastructural level. Direct modification of **membrane**-based sialic acids with biotin groups labels both glycolipids and glycoproteins. In this case, subsequent ultrastructural localization of biotinylated sites would not discern between these two classes of glycoconjugate in an unambiguous manner. When biotinylated cells are fixed prior to interaction with ferritin-conjugated avidin, the mean distance of marker molecules from the **membrane bilayer** is 8.0 nm. In contrast, if the cells are allowed to cap through the action of ferritin-avidin **conjugates** on unfixed cells, the average distance (13.0 nm) of the marker molecules appears even more distant from the **membrane** on the capped portion of the cell (uropod), whereas those on the **head** region are positioned in close proximity to the **bilayer** (3.7 nm). In order to exclusively label cell surface glycolipids on the ultrastructural level, bovine brain gangliosides were biotinylated in vitro and the haptenized gangliosides were incorporated into intact cells. In this case, marker molecules denoting the incorporated gangliosides were found in relatively close juxtaposition to the **membrane** surface, in a manner strikingly similar to the labeling pattern of the head region on capped cells. These results support the concept that, in the native state, the carbohydrate portion of glycolipids is positioned closer to the **membrane bilayer** than that of glycoproteins.

=> (cap or capping) and membrane and antibod?  
L16 2107 (CAP OR CAPPING) AND MEMBRANE AND ANTIBOD?

=> py>1999  
<-----User Break----->

SEARCH ENDED BY USER

=>

=>

=> py>1999 and 116  
L17 305 PY>1999 AND L16

=> 116 not 117  
L18 1802 L16 NOT L17

=> py>1998 and 118  
L19 63 PY>1998 AND L18

=> 118 not 119  
L20 1739 L18 NOT L19

=> t ti 120 1-50

L20 ANSWER 1 OF 1739 MEDLINE on STN  
TI Immunolocalization of integrin-like proteins in *Arabidopsis* and *Chara*.

L20 ANSWER 2 OF 1739 MEDLINE on STN  
TI Mechanotransduction molecules in the plant gravisensory response:  
amyloplast/statolith membranes contain a beta 1 integrin-like protein.

- L20 ANSWER 3 OF 1739 MEDLINE on STN  
TI Central root **cap** cells are depleted of endoplasmic microtubules and actin microfilament bundles: implications for their role as gravity-sensing statocytes.
- L20 ANSWER 4 OF 1739 MEDLINE on STN  
TI Microsomal **membrane** proteins and vanadate-sensitive ATPase from *Vicia faba* root tips after clinostat treatment.
- L20 ANSWER 5 OF 1739 MEDLINE on STN  
TI Purification and immunolocalization of an annexin-like protein in pea seedlings.
- L20 ANSWER 6 OF 1739 MEDLINE on STN  
TI Developmental regulation of lymphocyte-specific protein 1 (LSP1) expression in thymus during human T-cell maturation.
- L20 ANSWER 7 OF 1739 MEDLINE on STN  
TI Odontoblast differentiation: a response to environmental calcium?.
- L20 ANSWER 8 OF 1739 MEDLINE on STN  
TI Gamma-glutamyl transpeptidase, an ecto-enzyme regulator of intracellular redox potential, is a component of TM4 signal transduction complexes.
- L20 ANSWER 9 OF 1739 MEDLINE on STN  
TI An analysis of microvessel density, androgen receptor, p53 and HER-2/neu expression and Gleason score in prostate cancer . preliminary results and therapeutic implications.
- L20 ANSWER 10 OF 1739 MEDLINE on STN  
TI Human cementum tumor cells have different features from human osteoblastic cells in vitro.
- L20 ANSWER 11 OF 1739 MEDLINE on STN  
TI The effects of brefeldin A on acrosome formation and protein transport to the acrosome in organ cultures of rat seminiferous tubules.
- L20 ANSWER 12 OF 1739 MEDLINE on STN  
TI A novel dipstick developed for rapid *Bet v 1*-specific IgE detection: recombinant allergen immobilized via a monoclonal **antibody** to crystalline bacterial cell-surface layers.
- L20 ANSWER 13 OF 1739 MEDLINE on STN  
TI Adducin is an in vivo substrate for protein kinase C: phosphorylation in the MARCKS-related domain inhibits activity in promoting spectrin-actin complexes and occurs in many cells, including dendritic spines of neurons.
- L20 ANSWER 14 OF 1739 MEDLINE on STN  
TI Heterogeneity in the presence of CD4-like molecules on human spermatozoa.
- L20 ANSWER 15 OF 1739 MEDLINE on STN  
TI Virulence and functions of myosin II are inhibited by overexpression of light meromyosin in *Entamoeba histolytica*.
- L20 ANSWER 16 OF 1739 MEDLINE on STN  
TI Radiation-induced apoptosis in human lymphocytes and lymphoma cells critically relies on the up-regulation of CD95/Fas/APO-1 ligand.
- L20 ANSWER 17 OF 1739 MEDLINE on STN  
TI Peripheral blood lymphocytes from psoriatic patients are hyporesponsive to beta-streptococcal superantigens.

- L20 ANSWER 18 OF 1739 MEDLINE on STN  
TI An essential role for the interaction between hyaluronan and hyaluronan binding proteins during joint development.
- L20 ANSWER 19 OF 1739 MEDLINE on STN  
TI The olfactory adenylyl cyclase III is expressed in rat germ cells during spermiogenesis.
- L20 ANSWER 20 OF 1739 MEDLINE on STN  
TI Downregulation of the beta4 integrin subunit in prostatic carcinoma and prostatic intraepithelial neoplasia.
- L20 ANSWER 21 OF 1739 MEDLINE on STN  
TI Molecular cloning and characterization of P47, a novel boar sperm-associated zona pellucida-binding protein homologous to a family of mammalian secretory proteins.
- L20 ANSWER 22 OF 1739 MEDLINE on STN  
TI Association of an 80 kDa protein with C-CAM1 cytoplasmic domain correlates with C-CAM1-mediated growth inhibition.
- L20 ANSWER 23 OF 1739 MEDLINE on STN  
TI Colon carcinoma cells use different mechanisms to escape CD95-mediated apoptosis.
- L20 ANSWER 24 OF 1739 MEDLINE on STN  
TI A crossreactivity at the immunoglobulin E level of the cell wall mannoproteins of *Candida albicans* with other pathogenic *Candida* and airborne yeast species.
- L20 ANSWER 25 OF 1739 MEDLINE on STN  
TI Simultaneous quantitation of specific IgE against 20 purified allergens in allergic patients sera by checkerboard immunoblotting (CBIB).
- L20 ANSWER 26 OF 1739 MEDLINE on STN  
TI Binding of the soluble, truncated form of an Fc receptor (mouse Fc gamma RII) to **membrane**-bound IgG as measured by total internal reflection fluorescence microscopy.
- L20 ANSWER 27 OF 1739 MEDLINE on STN  
TI **Antibody**-induced and cytoskeleton-mediated redistribution and shedding of viral glycoproteins, expressed on pseudorabies virus-infected cells.
- L20 ANSWER 28 OF 1739 MEDLINE on STN  
TI Superantigenicity of helper T-cell mitogen (SPM-2) isolated from culture supernatants of *Streptococcus pyogenes*.
- L20 ANSWER 29 OF 1739 MEDLINE on STN  
TI Costimulatory molecules in human atherosclerotic plaques: an indication of antigen specific T lymphocyte activation.
- L20 ANSWER 30 OF 1739 MEDLINE on STN  
TI Epstein-Barr virus-encoded LMP-1 protein upregulates the pNDCF group of nucleoskeleton-cytoskeleton-associated proteins.
- L20 ANSWER 31 OF 1739 MEDLINE on STN  
TI Visualization of Golgi apparatus in methacrylate embedded conifer embryo tissue using the monoclonal **antibody** JIM 84.
- L20 ANSWER 32 OF 1739 MEDLINE on STN  
TI Leukosialin (CD43, sialophorin) redistribution in uropods of polarized

neutrophils is induced by CD43 cross-linking by **antibodies**, by colchicine or by chemotactic peptides.

- L20 ANSWER 33 OF 1739 MEDLINE on STN  
TI Localization of nerve cells in the developing rat tooth.
- L20 ANSWER 34 OF 1739 MEDLINE on STN  
TI Immunohistochemical localization of nerve fibres during development of embryonic rat molar using peripherin and protein gene product 9.5 **antibodies**.
- L20 ANSWER 35 OF 1739 MEDLINE on STN  
TI The antigen receptor complex on cord B lymphocytes.
- L20 ANSWER 36 OF 1739 MEDLINE on STN  
TI Identification of two regions in the N-terminal domain of ActA involved in the actin comet tail formation by Listeria monocytogenes.
- L20 ANSWER 37 OF 1739 MEDLINE on STN  
TI Nitric oxide inhibits **capping** in HL-60 cells.
- L20 ANSWER 38 OF 1739 MEDLINE on STN  
TI Fibrin(ogen) and von Willebrand factor deposition are associated with intimal thickening after balloon angioplasty of the rabbit carotid artery.
- L20 ANSWER 39 OF 1739 MEDLINE on STN  
TI Markers of bone and cementum formation accumulate in tissues regenerated in periodontal defects treated with expanded polytetrafluoroethylene membranes.
- L20 ANSWER 40 OF 1739 MEDLINE on STN  
TI Local accumulation of alpha-spectrin-related protein under plasma **membrane** during **capping** and phagocytosis in Acanthamoeba.
- L20 ANSWER 41 OF 1739 MEDLINE on STN  
TI Effects of Ajoene on lymphocyte and macrophage **membrane**-dependent functions.
- L20 ANSWER 42 OF 1739 MEDLINE on STN  
TI An Aplysia cell adhesion molecule associated with site-directed actin filament assembly in neuronal growth cones.
- L20 ANSWER 43 OF 1739 MEDLINE on STN  
TI Analysis of yeast trimethylguanosine-capped RNAs by midwestern blotting.
- L20 ANSWER 44 OF 1739 MEDLINE on STN  
TI Cell adhesion molecules NgCAM and axonin-1 form heterodimers in the neuronal **membrane** and cooperate in neurite outgrowth promotion.
- L20 ANSWER 45 OF 1739 MEDLINE on STN  
TI CD66: role in the regulation of neutrophil effector function.
- L20 ANSWER 46 OF 1739 MEDLINE on STN  
TI Presence of the elastin-laminin receptor on human activated lymphocytes.
- L20 ANSWER 47 OF 1739 MEDLINE on STN  
TI ANCA defines the clinical disease manifestations of vasculitis.
- L20 ANSWER 48 OF 1739 MEDLINE on STN  
TI Association of murine splenocyte CD3 complex to the cytoskeleton: absence of modulation by exogenous fatty acids.

L20 ANSWER 49 OF 1739 MEDLINE on STN  
TI Association of the tetraspan protein CD9 with integrins on the surface of S-16 Schwann cells.

L20 ANSWER 50 OF 1739 MEDLINE on STN  
TI Evidence for the presence of immunoglobulin E **antibodies** specific to the cell wall phosphomannoproteins of *Candida albicans* in patients with allergies.

=> d ibib abs 120 27,32,44,50

L20 ANSWER 27 OF 1739 MEDLINE on STN  
ACCESSION NUMBER: 1998001342 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 9343177  
TITLE: **Antibody**-induced and cytoskeleton-mediated redistribution and shedding of viral glycoproteins, expressed on pseudorabies virus-infected cells.  
AUTHOR: Favoreel H W; Nauwynck H J; Van Oostveldt P; Mettenleiter T C; Pensaert M B  
CORPORATE SOURCE: Laboratory of Virology, Faculty of Veterinary Medicine, University of Ghent, Belgium.  
SOURCE: Journal of virology, (1997 Nov) 71 (11) 8254-61.  
Journal code: 0113724. ISSN: 0022-538X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199711  
ENTRY DATE: Entered STN: 19971224  
Last Updated on STN: 19971224  
Entered Medline: 19971113

AB Fluorescein isothiocyanate-labeled porcine pseudorabies virus (PrV) polyclonal **antibodies** were added to PrV-infected swine kidney cells in vitro at 37 degrees C. In approximately 47% of the infected cells, the addition induced passive patching and subsequent energy- and microtubule-dependent **capping** of all viral envelope glycoproteins, expressed on the plasma membranes of the infected cells. Further contraction and extrusion of the capped viral glycoproteins occurred in approximately 30% of the capped cells 2 h after the addition of **antibodies** and was accompanied by a concentration of F-actin beneath the caps. At that time, about 18% of the extruded caps were shed spontaneously into the surrounding medium. Mechanical force released 85% of the extruded caps, leaving viable cells with no microscopically detectable levels of viral glycoproteins on their plasma membranes. Experiments with PrV deletion mutants showed that viral glycoproteins gE and gI are important in triggering viral glycoprotein redistribution. Since the PrV gE-gI complex exhibits Fc receptor activity which facilitates **capping**, the importance of gE and gI may be partially explained by **antibody** bipolar bridging.

L20 ANSWER 32 OF 1739 MEDLINE on STN  
ACCESSION NUMBER: 97367997 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 9224764  
TITLE: Leukosialin (CD43, sialophorin) redistribution in uropods of polarized neutrophils is induced by CD43 cross-linking by **antibodies**, by colchicine or by chemotactic peptides.  
AUTHOR: Seveau S; Lopez S; Lesavre P; Guichard J; Cramer E M; Halbwachs-Mecarelli L  
CORPORATE SOURCE: INSERM U90 Hopital Necker, Paris, France.

SOURCE: Journal of cell science, (1997 Jul) 110 ( Pt 13) 1465-75.  
Journal code: 0052457. ISSN: 0021-9533.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199709  
ENTRY DATE: Entered STN: 19971008  
Last Updated on STN: 19971008  
Entered Medline: 19970922

AB We investigated a possible association of leukosialin (CD43), the major surface sialoglycoprotein of leukocytes, with neutrophil cytoskeleton. We first analysed the solubility of CD43 in Triton X-100 and observed that CD43 of resting neutrophils was mostly soluble. The small proportion of CD43 molecules, which 'spontaneously' precipitated in Triton, appeared associated with F-actin, as demonstrated by the fact that this insolubility did not occur when cells were incubated with cytochalasin B or when F-actin was depolymerized with DNase I in the Triton precipitate. Cell stimulation with anti-CD43 mAb (MEM59) enhanced this CD43-cytoskeleton association. By immunofluorescence as well as by electron microscopy, we observed a redistribution of CD43 on the neutrophil **membrane**, initially in patches followed by caps, during anti-CD43 cross-linking at 37 degrees C. This **capping** did not occur at 4 degrees C and was inhibited by cytochalasin B and by a myosin disrupting drug butanedione monoxime, thus providing evidence that the actomyosin contracile system is involved in the **capping** and further suggesting an association of CD43 with the cytoskeleton. Some of the capped cells exhibited a front-tail polarization with CD43 caps located in the uropod at the rear of the cell. Surprisingly, colchicine and the chemotactic factor fNLPNTL which induce neutrophil polarization associated with cell motility, also resulted in a clustering of CD43 in the uropod, independently of a cross-linking of the molecule by mAbs. An intracellular redistribution of F-actin, mainly at the leading front and of myosin in the tail, was observed during CD43 clustering induced by colchicine and in cells polarized by anti-CD43 mAbs cross-linking. We conclude that neutrophil CD43 interacts with the cytoskeleton, either directly or indirectly, to redistribute in the cell uropod under **antibodies** stimulation or during cell polarization by colchicine, thus highly suggesting that CD43 may be involved in cell polarization.

L20 ANSWER 44 OF 1739 MEDLINE on STN  
ACCESSION NUMBER: 97133428 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8978825  
TITLE: Cell adhesion molecules NgCAM and axonin-1 form heterodimers in the neuronal **membrane** and cooperate in neurite outgrowth promotion.  
AUTHOR: Buchstaller A; Kunz S; Berger P; Kunz B; Ziegler U; Rader C; Sonderegger P  
CORPORATE SOURCE: Institute of Biochemistry, University of Zurich, Switzerland.  
SOURCE: Journal of cell biology, (1996 Dec) 135 (6 Pt 1) 1593-607.  
Journal code: 0375356. ISSN: 0021-9525.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-Z75013  
ENTRY MONTH: 199701  
ENTRY DATE: Entered STN: 19970219  
Last Updated on STN: 19970219  
Entered Medline: 19970117

AB The axonal surface glycoproteins neuronglia cell adhesion molecule (NgCAM)

and axonin-1 promote cell-cell adhesion, neurite outgrowth and fasciculation, and are involved in growth cone guidance. A direct binding between NgCAM and axonin-1 has been demonstrated using isolated molecules conjugated to the surface of fluorescent microspheres. By expressing NgCAM and axonin-1 in myeloma cells and performing cell aggregation assays, we found that NgCAM and axonin-1 cannot bind when present on the surface of different cells. In contrast, the cocapping of axonin-1 upon **antibody**-induced **capping** of NgCAM on the surface of CV-1 cells coexpressing NgCAM and axonin-1 and the selective chemical cross-linking of the two molecules in low density cultures of dorsal root ganglia neurons indicated a specific and direct binding of axonin-1 and Ng-CAM in the plane of the same **membrane**. Suppression of the axonin-1 translation by antisense oligonucleotides prevented neurite outgrowth in dissociated dorsal root ganglia neurons cultured on an NgCAM substratum, indicating that neurite outgrowth on NgCAM substratum requires axonin-1. Based on these and previous results, which implicated NgCAM as the neuronal receptor involved in neurite outgrowth on NgCAM substratum, we concluded that neurite outgrowth on an NgCAM substratum depends on two essential interactions of growth cone NgCAM: a trans-interaction with substratum NgCAM and a cis-interaction with axonin-1 residing in the same growth cone **membrane**.

L20 ANSWER 50 OF 1739 MEDLINE on STN  
ACCESSION NUMBER: 97071908 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8914753  
TITLE: Evidence for the presence of immunoglobulin E  
    **antibodies** specific to the cell wall  
    phosphomannoproteins of *Candida albicans* in patients with  
    allergies.  
AUTHOR: Kanbe T; Morishita M; Ito K; Tomita K; Utsunomiya K;  
    Ishiguro A  
CORPORATE SOURCE: Laboratory of Medical Mycology, Nagoya University School of  
    Medicine, Japan.. tkanbe@tsuru.med.nagoya.u.ac.jp  
SOURCE: Clinical and diagnostic laboratory immunology, (1996 Nov) 3  
    (6) 645-50.  
    Journal code: 9421292. ISSN: 1071-412X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199702  
ENTRY DATE: Entered STN: 19970305  
    Last Updated on STN: 19970305  
    Entered Medline: 19970218  
AB To determine the major antigenic component of *Candida albicans* against  
    immunoglobulin E (IgE) **antibodies** in the sera of patients with  
    allergies who were positive for IgE **antibodies** to *C. albicans*  
    crude antigen in a CAP system, phosphomannoproteins (CAMP/A or  
    CAMP/B for serotype A or B strain, respectively) and their acid-stable  
    portions (CAMP-S/A or CAMP-S/B) were isolated from beta-mercaptoethanol  
    (2-ME) extracts of *C. albicans* cells of serotypes A and B, and IgE  
    **antibodies** against these components were compared with those  
    against protein complex and enolase (CAE) fractions isolated from *C.*  
    *albicans* cells. The dot blot test, which was used to detect IgE  
    **antibodies** to the *C. albicans* antigens, showed that IgE  
    **antibodies** to the 2-ME extract and phosphomannoprotein fractions  
    were present in the sera of 98.0% (2-ME extract), 96.8% (CAMP/A), 93.2%  
    (CAMP-S/A), 97.2% (CAMP/B), and 81.5% (CAMP-S/B) of the patients, whereas  
    IgE **antibodies** to the protein complex and CAE fractions were  
    found in the sera of 73.6 and 48.8% of the patients, respectively. The  
    extent of IgE binding to the 2-ME extract and phosphomannoproteins was  
    well correlated with the fluorescence intensities estimated with the

**CAP** system. Furthermore, the results obtained from the inhibition experiment with the **CAP** system indicated that the binding of IgE **antibodies** to *Candida* antigens is strongly inhibited by the phosphomannoprotein fraction and is an indication that the serum of the patients contained IgE **antibodies** specific to the cell wall phosphomannoproteins of *C. albicans*. Finally, an initial chemical analysis indicated that the epitopes for IgE **antibodies** on the phosphomannoproteins is a carbohydrate portion, since the ability of CAMP/A to inhibit the binding of IgE **antibodies** to the homologous CAMP/A was destroyed after oxidation by sodium periodate but not after digestion with proteinase K.

=> FIL STNGUIDE

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
--	---------------------	------------------

FULL ESTIMATED COST

210.64

365.37

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
--	---------------------	------------------

CA SUBSCRIBER PRICE

-5.84

-5.84

FILE 'STNGUIDE' ENTERED AT 16:56:56 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> logoff y

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
--	---------------------	------------------

FULL ESTIMATED COST

0.06

365.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
--	---------------------	------------------

CA SUBSCRIBER PRICE

0.00

-5.84

STN INTERNATIONAL LOGOFF AT 16:57:32 ON 22 JUL 2005

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005

=> fil medline biosis capplus embase wpids  
 COST IN U.S. DOLLARS SINCE FILE TOTAL  
 FULL ESTIMATED COST ENTRY SESSION  
 0.21 0.21

FILE 'MEDLINE' ENTERED AT 15:58:37 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 15:58:37 ON 22 JUL 2005  
Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 15:58:37 ON 22 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 15:58:37 ON 22 JUL 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> head (s) different (s) epitope  
L1 10 HEAD (S) DIFFERENT (S) EPITOPE

```
=> head (s) differ? (s) epitope
I:2          16 HEAD (S) DIFFER? (S) EPITOPE
```

```
=> dup rem l2
PROCESSING COMPLETED FOR L2
L3          12 DUP REM L2 (4 DUPLICATES REMOVED)
```

=> t ti 13 1-12

L3 ANSWER 1 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New bispecific antibodies that bind two different targets, useful for diagnosing, preventing or treating diseases such as a hyperproliferative (e.g. cancer), cardiovascular, neurodegenerative, metabolic or an autoimmune disease.

L3 ANSWER 2 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Detecting a cancer cell in a subject sample, also related to cancer treatments, comprises determining the level of nucleic acid that is linked to map position 8q22.3 of the human genome or its expression product.

L3 ANSWER 3 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New purified thrombospondin fragment extracted from a body fluid, useful for diagnosing cancer e.g. adenoma, adenocarcinoma, carcinoma, lymphoma or leukemia or as calibrators, indicators, immunogens and analytes.

- L3 ANSWER 4 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Selecting an antibody from a phage display library using sequential antigen panning, useful for treating or reducing infections, such as bacterial, virus and parasitic infection, and for inhibiting cancers.
- L3 ANSWER 5 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Diagnosing and/or treating cancer, such as brain, lymphatic, liver, stomach, testicular, cervical, endometrial, renal, lung and ovarian cancers, leukemia and melanoma, comprises using soluble MIC polypeptides as markers.
- L3 ANSWER 6 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Preventing, treating or managing cancer in a patient comprises administering to the patient VITAXIN or an antibody or its fragment that competes with VITAXIN for binding to Integrin alphavbeta3 and one or more other cancer therapies.
- L3 ANSWER 7 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.
- L3 ANSWER 8 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI New Major Histocompatibility Complex (MHC) molecule construct, useful for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells e.g., cancer.
- L3 ANSWER 9 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.
- L3 ANSWER 10 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Inducing human immunodeficiency virus-specific helper T-cell responses.
- L3 ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 1  
 TI Plakophilin, armadillo repeats, and nuclear localization.
- L3 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 2  
 TI Differential localization of two epitopes of *Escherichia coli* ribosomal protein L2 on the large ribosomal subunit by immune electron microscopy using monoclonal antibodies.

=> d ibib abs 13 9

L3 ANSWER 9 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2001-102938 [11] WPIDS  
 DOC. NO. NON-CPI: N2001-076388  
 DOC. NO. CPI: C2001-030197  
 TITLE: Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.  
 DERWENT CLASS: B04 S03  
 INVENTOR(S): NEW, R; TOTH, I  
 PATENT ASSIGNEE(S): (PROX-N) PROXIMA CONCEPTS LTD; (MOZA-N) MOZAICO DISCOVERY LTD; (MOZA-N) MOZAIC DISCOVERY LTD; (PROV-N) PROVALIS UK LTD  
 COUNTRY COUNT: 94  
 PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
-----------	-----------	------	----	----

-----

WO 2001001140 A1 20010104 (200111)\* EN 39  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TZ UG ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ  
 EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
 LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
 SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 AU 2000056923 A 20010131 (200124)  
 BR 2000012002 A 20020312 (200226)  
 EP 1190255 A1 20020327 (200229) EN  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI  
 CN 1359469 A 20020717 (200268)  
 KR 2002042537 A 20020605 (200277)  
 JP 2003503424 W 20030128 (200309) 29  
 AU 775310 B2 20040729 (200472)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001001140	A1	WO 2000-GB2465	20000627
AU 2000056923	A	AU 2000-56923	20000627
BR 2000012002	A	BR 2000-12002	20000627
		WO 2000-GB2465	20000627
EP 1190255	A1	EP 2000-942216	20000627
		WO 2000-GB2465	20000627
CN 1359469	A	CN 2000-809653	20000627
KR 2002042537	A	KR 2001-716715	20011227
JP 2003503424	W	WO 2000-GB2465	20000627
		JP 2001-507094	20000627
AU 775310	B2	AU 2000-56923	20000627

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000056923	A Based on	WO 2001001140
BR 2000012002	A Based on	WO 2001001140
EP 1190255	A1 Based on	WO 2001001140
JP 2003503424	W Based on	WO 2001001140
AU 775310	B2 Previous Publ. Based on	AU 2000056923 WO 2001001140

PRIORITY APPLN. INFO: GB 1999-15074 19990628  
 AN 2001-102938 [11] WPIDS  
 AB WO 200101140 A UPAB: 20010224  
 NOVELTY - Epitopes are formed by non-covalent association of conjugates, and assemblies composed of combinations of different head groups can elicit biological responses or participate in binding with biological receptors that assemblies of single head groups cannot.

DETAILED DESCRIPTION - A composition for interacting with a ligand comprises a non-covalent association of **different** conjugates, each conjugate comprising a **head** group and a tail group, where the tail groups form a hydrophobic aggregation and the conjugates are movable within the association so that, in the presence of a ligand, at least 2 of the **head** groups are appropriately positioned to form an **epitope** capable of interacting with the ligand more strongly than each of the **head** groups individually. An INDEPENDENT CLAIM is included for the following:

(a) preparation of the composition; and

(b) a method for producing a molecule for interacting with a ligand, comprising producing a composition as above; identifying the head groups which form an epitope for the ligand; and producing a molecule incorporating the functional groups of the head groups, optionally spaced apart by 1 or more linker groups so that the molecule is capable of interacting with the ligand more strongly than each of the head groups individually.

USE - The compositions are useful in therapeutic, prophylactic or diagnostic methods.

ADVANTAGE - Strong specific binding interactions can be achieved with conjugates in which the head groups are small compared to conventional biological receptors, e.g. if the head group is an oligo-peptide, then the length of the peptide chain would be at most 10 (preferably at most 6) amino acids, and compositions can be made less immunogenic than their protein counterparts.

Dwg.0/2

=> d ibib abs 13 1-8, 10-12

L3 ANSWER 1 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2005-091969 [10] WPIDS  
DOC. NO. CPI: C2005-031094  
TITLE: New bispecific antibodies that bind two different targets, useful for diagnosing, preventing or treating diseases such as a hyperproliferative (e.g. cancer), cardiovascular, neurodegenerative, metabolic or an autoimmune disease.  
DERWENT CLASS: B04 D16  
INVENTOR(S): HANSEN, H J; MCBRIDE, W J; QU, Z  
PATENT ASSIGNEE(S): (IMMU-N) IMMUNOMEDICS INC  
COUNTRY COUNT: 108  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2005004809	A2	20050120 (200510)*	EN	163	
RW:	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W:	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW			
US 2005100543	A1	20050512 (200532)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005004809	A2	WO 2004-US20995	20040701
US 2005100543	A1 Provisional	US 2003-483832P	20030701
		US 2004-882151	20040701

PRIORITY APPLN. INFO: US 2003-483832P 20030701; US  
2004-882151 20040701

AN 2005-091969 [10] WPIDS

AB WO2005004809 A UPAB: 20050211

NOVELTY - A bispecific antibody comprising the structure (IgG1)-(scFv)<sub>2</sub>, is new. The antibody comprises a pair of heavy chains and a pair of light chains, where each heavy chain comprises an IgG1 heavy chain and an scFv,

where the scFv is fused to the C-terminus of the IgG1 heavy chain, optionally via a linker peptide.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a binding complex comprising a tetravalent binding molecule bound to a targetable construct, where the tetravalent binding molecule comprises 2 binding sites for a carrier epitope and 2 binding sites for a target epitope, and where the targetable construct comprises a molecular scaffold and at least 2 carrier epitopes;
- (2) treating a disease in a subject;
- (3) diagnosing/detecting a disease in a subject;
- (4) a kit comprising a tetravalent binding molecule comprising 2 binding sites for a carrier epitope and 2 binding sites for a target epitope; optionally, a clearing agent; and a targetable construct comprising a molecular scaffold and at least 2 carrier epitopes; and
- (5) a pharmaceutical composition comprising the bispecific antibody cited above.

ACTIVITY - Cytostatic; Cardiovascular-Gen.; Neuroprotective; Endocrine-Gen.; Immunosuppressive.

No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The composition and methods are useful for diagnosing, preventing or treating diseases such as a hyperproliferative disease, pathogenic disease, cancer, cardiovascular disease, neurodegenerative disease, metabolic disease, or autoimmune disease.

Dwg.0/8

L3 ANSWER 2 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2004-248472 [23] WPIDS  
CROSS REFERENCE: 2004-315574 [29]  
DOC. NO. NON-CPI: N2004-197115  
DOC. NO. CPI: C2004-097127  
TITLE: Detecting a cancer cell in a subject sample, also related to cancer treatments, comprises determining the level of nucleic acid that is linked to map position 8q22.3 of the human genome or its expression product.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): CLANCY, J; HENDERSON, M; HENSHALL, S; O'BRIEN, P; SAUNDERS, D; SUTHERLAND, R; WATTS, C; O'BRIEN, P  
PATENT ASSIGNEE(S): (GARV-N) GARVAN INST MEDICAL RES  
COUNTRY COUNT: 106  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004022750	A1	20040318 (200423)*	EN	331	
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
AU	2003257275	A1 20040329 (200459)			
EP	1539957	A1 20050615 (200539)	EN		
R:	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004022750	A1	WO 2003-AU1164	20030905

AU 2003257275 A1  
EP 1539957 A1

AU 2003-257275 20030905  
EP 2003-793494 20030905  
WO 2003-AU1164 20030905

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003257275	A1 Based on	WO 2004022750
EP 1539957	A1 Based on	WO 2004022750

PRIORITY APPLN. INFO: US 2002-425218P 20021107; AU  
2002-951346 20020905

AN 2004-248472 [23] WPIDS

CR 2004-315574 [29]

AB WO2004022750 A UPAB: 20050621

NOVELTY - Detecting a cancer cell in a subject comprises determining the level of nucleic acid (Edd) that is linked to map position 8q22.3 of the human genome or its expression product in a sample of the subject, where an elevated level of the nucleic acid or polypeptide is indicative of cancer in the subject.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) a method for diagnosing a cancer or predicting recurrence of a cancer in a subject comprising determining the level of mRNA or protein encoded by nucleic acid as cited above;
- (2) the isolated nucleic acid molecule for detecting cancer cell;
- (3) an isolated or recombinant protein complex;
- (4) an antibody that binds to the protein complex;
- (5) a kit for detecting or producing a protein complex, comprising an EDD polypeptide or a portion of an EDD polypeptide and a second polypeptides selected from a protein having tumor suppressor activity, a protein having cell cycle modulatory activity, a protein associated with DNA repair or damage, a nuclear targeting protein, and a progesterone receptor protein or its portion, where the portion of the second polypeptide is sufficient to bind to the EDD polypeptide or the portion of an EDD polypeptide;
- (6) methods for isolating the protein complex;
- (7) a method for determining a predisposition for disease, or disease state;
- (8) a method for determining a modulator of the activity, formation or stability of an isolated or recombinant protein complex;
- (9) a method for determining a modulator of the level of protein complex formation;
- (10) a method for treating a condition associated with elevated expression of EDD protein in a cell;
- (11) an antisense nucleic acid, ribozyme, PNA, interfering RNA or siRNA; and
- (12) a pharmaceutical composition comprising the antisense nucleic acid, ribozyme, PNA, interfering RNA or siRNA.

ACTIVITY - Cytostatic. No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The methods and modulator are useful for treating a condition associated with EDD over expression such as cancer, e.g. squamous cell carcinoma, hepatocellular carcinoma, ovarian cancer, breast cancer, melanoma, head and neck cancer, adenocarcinoma, squamous lung cancer, gastrointestinal cancer (e.g. gastric, colon, or pancreatic cancer), renal cell cancer, bladder cancer, prostate cancer, non-squamous carcinoma, glioblastoma and medulloblastoma. The components and composition are useful for reducing the expression of EDD in a cell to inhibit cellular proliferation (all claimed).

Dwg.0/29

L3 ANSWER 3 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-226901 [21] WPIDS  
 DOC. NO. CPI: C2004-089523  
 TITLE: New purified thrombospondin fragment extracted from a body fluid, useful for diagnosing cancer e.g. adenoma, adenocarcinoma, carcinoma, lymphoma or leukemia or as calibrators, indicators, immunogens and analytes.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): WILLIAMS, K J  
 PATENT ASSIGNEE(S): (WILL-I) WILLIAMS K J  
 COUNTRY COUNT: 105  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004018995	A2	20040304 (200421)*	EN	76	
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
US 2004053392	A1	20040318 (200421)			
AU 2003262727	A1	20040311 (200457)			
US 2005065324	A1	20050324 (200526)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004018995	A2	WO 2003-US26023	20030820
US 2004053392	A1 Provisional	US 2002-405494P	20020823
		US 2003-419462	20030421
AU 2003262727	A1	AU 2003-262727	20030820
US 2005065324	A1 Provisional	US 2002-405494P	20020823
	CIP of	US 2003-419462	20030421
		US 2004-782968	20040220

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003262727	A1 Based on	WO 2004018995

PRIORITY APPLN. INFO: US 2003-419462 20030421; US  
2002-405494P 20020823

AN 2004-226901 [21] WPIDS

AB WO2004018995 A UPAB: 20040326

NOVELTY - A purified thrombospondin fragment that has been extracted from a bodily fluid, where the fragment is within a molecular weight range selected from 80-10 kDa, 40-60 kDa or 20-35 kDa, and where the size in kDa is determined by gel electrophoresis after disulfide bond reduction, is new.

DETAILED DESCRIPTION - A thrombospondin fragment or its portion comprising:

- (a) one that starts between amino acyl residues N-230 and G-253 inclusive and ends between amino acyl residues V-400 and S-428;
- (b) one that starts between amino acyl residues N-230 and G-253, inclusive and ends between amino acyl residues D-527 and S-551;
- (c) one that starts between amino acyl residues N-230 and G-253,

inclusive and ends between amino acyl residues G-787 and V-811;

(d) one that starts between amino acyl residues I-165 and V-263, inclusive and ends between amino acyl residues K-412 and 1-530;

(e) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues 1-530 and R-733;

(f) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues R-733 and Y-982;

(g) one that starts between amino acyl residues I-165 and V-263, inclusive, and ends between amino acyl residues K-412 and 1-530;

(h) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues 1-530 and R-733;

(i) one that starts between amino acyl residues 1-165 and V-263, inclusive, and ends between amino acyl residues R-792 and Y-982.

The thrombospondin fragment comprises at least 4-6 contiguous amino acyl residues from the thrombospondin sequence, where the amino acid sequence of the fragment is limited to one that is outside of a thrombospondin region given above.

INDEPENDENT CLAIMS are also included for:

- (1) a molecule identical in primary structure to the compound above;
- (2) a method to detect and/or quantify a thrombospondin fragment;
- (3) a method of producing antibodies against a thrombospondin fragment comprising administering the fragment to an organism capable of producing antibodies;
- (4) a monoclonal or polyclonal antibody produced by the method of (3);
- (5) a cell line producing the monoclonal antibodies or the binding agent;
- (6) a method of producing a peptide or non-peptide binding agent against a thrombospondin fragment;
- (7) a kit for the determination of the presence of, and/or the amount of, and/or the concentration of, a thrombospondin fragment in a material taken or gathered from an organism comprising the thrombospondin fragment, a binding agent that will react with thrombospondin but not with the fragment or fragments of interest or an antibody that will react with thrombospondin fragments of interest but not with thrombospondin;
- (8) a method comprising determining the amount of the unlabeled or differently labeled fragment through comparison to the results obtained from the unlabeled or differently labeled fragment;
- (9) a method to detect the presence and/or clinical course of a neoplastic disease in an individual; and
- (10) a method of producing a binding agent against a thrombospondin fragment comprising binding a phage to the thrombospondin fragment.

USE - The thrombospondin fragments are useful in diagnostic methods for cancer, as method calibrators, method indicators, as immunogens and as analytes for methods with sustained clinical utility. Cancer is selected from adenoma, adenocarcinoma, carcinoma, lymphoma, leukemia, solid cancer, liquid cancer, metastatic cancer, pre-metastatic cancer, non-metastatic cancer, a cancer with vascular invasion, internal cancer, skin cancer, cancer of the respiratory system, cancer of the circulatory system, cancer of the musculoskeletal system, cancer of a muscle, cancer of a bone, cancer of a joint, cancer of a tendon or ligament, cancer of the digestive system, cancer of the liver or biliary system, cancer of the pancreas, cancer of the head, cancer of the neck, cancer of the endocrine system, cancer of the reproductive system, cancer of the male reproductive system, cancer of the female reproductive system, cancer of the genitourinary system, cancer of a kidney, cancer of the urinary tract, cancer of a sensory system, cancer of the nervous system, cancer of a lymphoid organ, blood cancer, cancer of a gland, cancer of a mammary gland, cancer of a prostate gland, cancer of an endometrial tissue, cancer of a mesodermal tissue, cancer of an ectodermal tissue, cancer of an endodermal tissue, a teratoma, a poorly-differentiated cancer, a well-differentiated cancer, and a moderately differentiated cancer.

L3 ANSWER 4 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-011801 [01] WPIDS  
 DOC. NO. CPI: C2004-003469  
 TITLE: Selecting an antibody from a phage display library using sequential antigen panning, useful for treating or reducing infections, such as bacterial, virus and parasitic infection, and for inhibiting cancers.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): DIMITROV, D S; ZHANG, M  
 PATENT ASSIGNEE(S): (USSH) US DEPT HEALTH & HUMAN SERVICES; (DIMITROV D S; (ZHAN-I) ZHANG M  
 COUNTRY COUNT: 103  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003092630	A2	20031113 (200401)*	EN	78	
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
AU 2003237187	A1	20031117 (200442)			
US 2005123900	A1	20050609 (200541)			

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003092630	A2	WO 2003-US14292	20030506
AU 2003237187	A1	AU 2003-237187	20030506
US 2005123900	A1 Provisional	US 2002-378408P WO 2003-US14292 US 2005-513725	20020506 20030506 20050125

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003237187	A1 Based on	WO 2003092630

PRIORITY APPLN. INFO: US 2002-378408P 20020506; US  
2005-513725 20050125

AN 2004-011801 [01] WPIDS  
 AB WO2003092630 A UPAB: 20040102  
 NOVELTY - Selecting an antibody comprising selecting an antibody from a phage display library using sequential antigen panning, is new.  
 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:  
 (1) a sequential antigen panning method for selecting an antibody from a phage display library, comprising selecting phage from a phage display library using a first selecting condition, where the first selecting condition is an antigen at a known concentration, and selecting phage from the phage selected using a second selecting condition that differs from the first selecting conditions, with the proviso that this step can be repeated any number of times, each time using a different selecting conditions;  
 (2) a composition produced using any of the methods;

- (3) a composition comprising a neutralizing antibody that recognizes more than one strain of a pathogen;
- (4) an antibody to HIV envelope glycoprotein that can recognize one or more strains of HIV, comprising a 233, 228, 231, 237, 214, 210, 212 or 212 amino acid sequence (SEQ ID NO: 1-8), given in the specification, or their variants that retains the ability to bind to the same epitope to a greater or lesser extent;
- (5) a fusion protein or conjugate comprising the antibody of (4);
- (6) a composition comprising the antibody of (4), where the toxin is *Pseudomonas* toxin;
- (7) an isolated or purified nucleic acid molecule comprising a sequence encoding amino acid sequence with SEQ ID NO: 1-6, or its variant that retains the ability to bind to the same epitope to a greater or lesser extent;
- (8) a vector comprising the isolated or purified nucleic acid of (7);
- (9) a composition comprising the isolated or purified nucleic acid molecule of (7), optionally in the form of a vector;
- (10) a host cell comprising the isolated or purified nucleic acid molecule of (7), optionally in the form of a vector;
- (11) treating, inhibiting or reducing the severity of an infection in an animal, comprising administering an infection-inhibiting amount of a composition comprising an antibody produced by the method, optionally in the form of a fusion protein, where the antibody or fusion protein is optionally encoded in an isolated or purified nucleic acid molecule, which is optionally in the form of a vector and/or optionally contained within a cell, where the infection in the animal is inhibited; and
- (12) inhibiting cancer in a mammal, comprising administering an cancer-inhibiting amount of a composition comprising an antibody produced by the method, optionally in the form of a fusion protein, where the antibody or fusion protein is optionally encoded in an isolated or purified nucleic acid molecule, which is optionally in the form of a vector and/or optionally contained within a cell, where the cancer in the animal is inhibited.

ACTIVITY - Antibacterial; Virucide; Antiparasitic; Protozoacide; Fungicide; Cytostatic.

No biological data given.

MECHANISM OF ACTION - Gene-Therapy.

USE - The methods and compositions of the present invention are useful for treating, inhibiting or reducing the severity of an infection, such as bacterial, virus and parasitic infection, and for inhibiting cancers.

Dwg.0/5

L3 ANSWER 5 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2003-854115 [79] WPIDS  
 DOC. NO. CPI: C2003-241002  
 TITLE: Diagnosing and/or treating cancer, such as brain, lymphatic, liver, stomach, testicular, cervical, endometrial, renal, lung and ovarian cancers, leukemia and melanoma, comprises using soluble MIC polypeptides as markers.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): SPIES, T; SPIES, V  
 PATENT ASSIGNEE(S): (HUTC-N) HUTCHINSON CANCER RES CENT FRED  
 COUNTRY COUNT: 103  
 PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2003089616	A2 20031030 (200379)* EN	98		
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS				
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL  
PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU  
ZA ZM ZW  
AU 2003225093 A1 20031103 (200438)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003089616	A2	WO 2003-US12299	20030422
AU 2003225093	A1	AU 2003-225093	20030422

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003225093	A1 Based on	WO 2003089616

PRIORITY APPLN. INFO: US 2002-374442P 20020422  
AN 2003-854115 [79] WPIDS  
AB WO2003089616 A UPAB: 20031208

NOVELTY - Assaying for cancer in a subject comprises obtaining at least a first sample from a subject suspected of having or being at risk for developing cancer, and assaying for a soluble MIC polypeptide in the sample, wherein identification of a soluble MIC polypeptide in the sample indicates cancer.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) assaying for cancer in a subject, comprising obtaining a sample from a subject suspected of having or being at risk for developing cancer, assaying for a soluble MIC polypeptide in the sample comprising contacting a sample from the subject with a first antibody attached to a solid support, wherein the first antibody binds to a soluble MIC polypeptide in the sample, and incubating the sample with a second antibody, wherein the second antibody binds to the soluble MIC polypeptide, wherein identification of a soluble MIC polypeptide in the sample indicates cancer;

(2) treating cancer, comprising detecting cancer in a subject by obtaining a sample from the subject and assaying for a soluble MIC polypeptide in the sample, and administering to the subject chemotherapy, radiation therapy, gene therapy, or hormone therapy;

(3) diagnosing or prognosing an autoimmune disease or condition in a patient, comprising identifying a patient suspected of having an autoimmune disease or condition, and assaying for a soluble MIC polypeptide in a sample from the patient, wherein identification of a soluble MIC polypeptide in the sample indicates an autoimmune disease or condition;

(4) kit for diagnosing or prognosing cancer or an autoimmune disease in a patient, comprising, in suitable container means an agent that specifically recognizes all or part of a MIC polypeptide or a nucleic acid encoding a MIC polypeptide, and a positive control that can be used to determine whether the agent is capable of specifically recognizing all or part of a MIC polypeptide or a nucleic acid encoding a MIC polypeptide;

(5) screening for candidate therapeutic agents for an autoimmune disease, comprising contacting a MIC polypeptide with an NKG2D receptor polypeptide in the presence and absence of a candidate substance, assaying for binding between the MIC polypeptide and the NKG2D receptor in its presence and absence, wherein a reduction of binding in its presence compared to its absence is indicative of a candidate therapeutic agent for an autoimmune disease; and

(6) assaying an candidate therapeutic agent for efficacy against an autoimmune disease, comprising contacting a MIC polypeptide with an NKG2D receptor polypeptide in the presence and absence of the candidate substance, wherein the candidate substance is substantially pure, assaying for binding between the MIC polypeptide and the NKG2D receptor in its presence and absence, wherein a reduction of binding in its presence compared to its absence indicates the candidate substance has the ability to reduce binding between the MIC polypeptide and the NKG2D receptor.

ACTIVITY - Cytostatic; Immunosuppressive; Endocrine-Gen.; Anabolic; Hypertensive; Antipsoriatic; Antirheumatic; Antiarthritic; Antiinflammatory; Dermatological.

No biological data given.

MECHANISM OF ACTION - MIC-Modulator; Gene-Therapy.

No biological data given.

USE - The methods and compositions of the present invention are useful for diagnosing, prognosticating and/or treating cancer, such as brain cancer, lymphatic cancer, liver cancer, stomach cancer, testicular cancer, cervical cancer, ovarian cancer, leukemia, melanoma, head and neck cancer, esophageal cancer, colon cancer, breast cancer, lung cancer, prostate cancer, and renal cancer, and autoimmune diseases such as alopecia, Addison's disease, psoriasis, rheumatoid arthritis and systemic lupus erythematosis.

Dwg.0/2

L3 ANSWER 6 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-748337 [70] WPIDS  
CROSS REFERENCE: 2003-748311 [70]; 2004-604159 [58]  
DOC. NO. NON-CPI: N2003-599814  
DOC. NO. CPI: C2003-205213  
TITLE: Preventing, treating or managing cancer in a patient comprises administering to the patient VITAXIN or an antibody or its fragment that competes with VITAXIN for binding to Integrin alphavbeta3 and one or more other cancer therapies.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): DORMITZER, M; HEINRICH, J; KIENER, P; WALSH, W;  
WOESSNER, R  
PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE INC  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	
WO 2003075957	A1	20030918	(200370)*	EN	155	
	RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
	W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
US 2004001835	A1	20040101	(200402)			
AU 2003217930	A1	20030922	(200431)			
EP 1487492	A1	20041222	(200501)	EN		
	R:	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003075957	A1	WO 2003-US6684	20030304

US 2004001835	A1	Provisional Provisional Provisional	US 2002-361859P US 2002-370398P US 2003-444265P US 2003-379189	20020304 20020405 20030130 20030304
AU 2003217930	A1		AU 2003-217930	20030304
EP 1487492	A1		EP 2003-713905 WO 2003-US6684	20030304 20030304

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003217930	A1 Based on	WO 2003075957
EP 1487492	A1 Based on	WO 2003075957

PRIORITY APPLN. INFO: US 2003-444265P 20030130; US  
2002-361859P 20020304; US  
2002-370398P 20020405; US  
2003-379189 20030304

AN 2003-748337 [70] WPIDS  
CR 2003-748311 [70]; 2004-604159 [58]  
AB WO2003075957 A UPAB: 20050103

NOVELTY - Preventing, treating or managing cancer in a patient, comprises administering to the patient VITAXIN (RTM) or its antigen-binding fragment, or an antibody or its fragment that competes with VITAXIN (RTM) for binding to Integrin alpha v beta 3 and a dose of one or more other cancer therapies.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a pharmaceutical composition;
- (2) a method of screening for antibodies with specific binding affinity for the epitope specifically recognized by VITAXIN; and
- (3) a method for detecting Integrin alpha v beta 3 in tissue.

ACTIVITY - Cytostatic; Fungicide; Antiparasitic; Antiemetic; Antiinflammatory; Virucide. No biological data given.

MECHANISM OF ACTION - Gene therapy; Vaccine.

USE - The method is useful for preventing, treating or managing cancer in a patient (claimed).

Dwg.0/7

L3 ANSWER 7 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-167365 [16] WPIDS  
DOC. NO. CPI: C2003-043494  
TITLE: Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.  
DERWENT CLASS: B04 C06 D16  
INVENTOR(S): BARGATZE, R F; CUTLER, J E; GLEE, P M; HAN, Y; JUTILA, J W; NAGY, J O; PASCUAL, D  
PATENT ASSIGNEE(S): (BARG-I) BARGATZE R F; (CUTL-I) CUTLER J E; (GLEE-I) GLEE P M; (HANY-I) HAN Y; (JUTI-I) JUTILA J W; (NAGY-I) NAGY J O; (PASC-I) PASCUAL D; (LIGO-N) LIGOCYTE PHARM INC; (UYMO-N) UNIV MONTANA STATE-BOZEMAN  
COUNTRY COUNT: 97

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2002100325	A2 20021219 (200316)*	EN 56		
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ				
NL OA PT SD SE SL SZ TR TZ UG ZW				

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO  
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 US 2003223938 A1 20031204 (200380)  
 AU 2001297913 A1 20021223 (200452)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002100325	A2	WO 2001-US42712	20011015
US 2003223938	A1 Provisional Cont of	US 2000-239874P WO 2001-US42712 US 2003-412685	20001013 20011015 20030414
AU 2001297913	A1	AU 2001-297913	20011015

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001297913	A1 Based on	WO 2002100325

PRIORITY APPLN. INFO: US 2000-239874P 20001013; US  
 2003-412685 20030414

AN 2003-167365 [16] WPIDS  
 AB WO2002100325 A UPAB: 20030307

NOVELTY - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

DETAILED DESCRIPTION - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target under physiologically relevant shear conditions, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

INDEPENDENT CLAIMS are also included for the following:

(1) a therapeutic formulation (II) in unit dose form comprising (I), to modulate a specific interaction between a cell or toxin and its receptor on a target in a host, where L1 is derived from or mimics a ligand on the cell or toxin;

(2) a vaccine (III) comprising (I), where L1 is an epitope that is derived from a pathogen, pathogen-derived toxin or tumor cell, and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell;

(3) a diagnostic imaging agent comprising (I), and further comprising a contrast agent detectable by medical resonance imaging or other visualization techniques;

(4) a delivery vehicle (IV) comprising (I), and an agent to be delivered to the target;

(5) optimizing (V) a nanoparticle displaying polyvalent binding units having L1 and L2, comprises optimizing the amount of L1 on the nanoparticle under physiologically relevant shear conditions and holding the optimized amount of L1 constant, optimizing the amount of L2 under physiologically relevant shear conditions;

(6) a nanoparticle library (VI) comprising multiple polymer beads, where each bead contains several nanoparticles associated with the surface of the polymer bead, where all of the nanoparticles associated with any

one bead display the same polyvalent binding unit;

(7) a vaccine comprising (I), and a polynucleotide sequence that encodes an epitope found on a pathogen or a tumor cell and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell; and

(8) a nanoparticle produced by (VI).

ACTIVITY - Antibacterial; Fungicide; Virucide; Protozoacide; Anti-HIV; Immunostimulant; Antiinflammatory; Cytostatic.

MECHANISM OF ACTION - Vaccine; Inhibitor of lymphocyte attachment in Peyer's patch.

A variation on the Peyer's patch method was used to examine the P-selectin-mediated adhesion in a mouse mesentery venule model. A lateral incision was made into the abdominal wall to allow the small intestine to be externalized. The intestine was positioned for microscopic examination of the mesentery. A solution of PMA in phosphate buffered saline was superfused directly onto the mesentery to allow for upregulation of P-selectin in the endothelium of the mesentery venules. The area of the incision was treated and cannulation of the tail vein was performed. A variable dose of carbohydrate- and sulfate-displaying nanoparticle was administered. The results showed the reduction in number of leukocyte rolling and sticking events compared to the untreated control, and the increase in cell velocity relative to the untreated control. At the highest dosage tested (2.3 mg/kg of carbohydrate), there was a greater than 65% reduction in the number of rolling/sticking leukocytes and a nearly 90% increase in the rolling velocity, over the control.

USE - (I) is useful for sequestration of toxins in the bloodstream of a host, by administering (I) to bind a circulating toxin or toxic metabolic product, where the first ligand is derived from or mimics a receptor that specifically binds to the toxin or toxic metabolic product. The binding is effective to produce an effect such as decreased inflammation, decreased systemic toxicity, chelation therapy, neutralization of pathogens, inhibition of metastasis, inhibition of drug intoxication, tissue regeneration, selective cellular differentiation and proliferation. (I) is also useful in a diagnostic method by allowing (I) to bind to a toxin or pathogen or an antibody against such toxins or pathogens and then detecting nanoparticles bound to such toxins, pathogen or antibodies. (III) is formulated to elicit a protective immune response against a pathogen such as *Escherichia coli*, *Candida albicans*, *Brucella* sp., *Salmonella* sp., *Shigella* sp., *Pseudomonas* sp., *Bordetella* sp., *Clostridium* sp., group B strep, *E.coli* 0157, Norwalk virus, anthrax, human immunodeficiency virus (HIV), sexually transmitted diseases (STDs), Chlamydia, hepatitis B virus (HBV), malaria, cell wall proteins of *Candida* sp., and GB3 toxin from *E.coli* 0157. (IV) is useful for delivering an agent such as therapeutic or cytotoxic agent to a target. (VI) is useful for screening agents, by adding at least one candidate agent to the nanoparticle library, and detecting binding of the agent to any one or more polymer beads in the library. The candidate agent comprises a detectable label and acts as a reporter to L1. Vaccine construct comprising (I) is useful for delivering nanoparticle therapeutic molecules to an animal (all claimed).

The polymerized nanoparticle constructs and assemblies are useful as modulators, inhibitors and enhancers and drug delivery agents for a variety of interactions as well as their down-stream effects, such as pathogen-cell attachment, pathogen-derived-toxin-cell attachment, cell-cell attachment mediated diseases, integrin adhesions, complement fixation and chemokine-mediated events. The nanoparticles are readily used as synthetic vaccines.

Dwg.0/6

TITLE: New Major Histocompatibility Complex (MHC) molecule construct, useful for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells e.g., cancer.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): AMELLEM, O; BUUS, S; PETERSEN, L O; RUUD, E; SCHOLLER, J; WINTHER, L; AAMELLEM, O; RUUB, E; SCHOELLER, J  
 PATENT ASSIGNEE(S): (DAKO-N) DAKO AS; (DYNA-N) DYNAL BIOTECH ASA; (DAKO-N) DAKOCYTOMATION DENMARK AS  
 COUNTRY COUNT: 101  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002072631	A2	20020919 (200282)*	EN 304		
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
NO 2003004020	A	20031106 (200380)			
EP 1377609	A2	20040107 (200404)	EN		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002240818	A1	20020924 (200433)			
JP 2005500257	W	20050106 (200505)		439	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002072631	A2	WO 2002-DK169	20020313
NO 2003004020	A	WO 2002-DK169	20020313
		NO 2003-4020	20030911
EP 1377609	A2	EP 2002-706685	20020313
		WO 2002-DK169	20020313
AU 2002240818	A1	AU 2002-240818	20020313
JP 2005500257	W	JP 2002-571544	20020313
		WO 2002-DK169	20020313

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1377609	A2 Based on	WO 2002072631
AU 2002240818	A1 Based on	WO 2002072631
JP 2005500257	W Based on	WO 2002072631

PRIORITY APPLN. INFO: US 2001-275470P 20010314; DK  
 2001-435 20010314; DK  
 2001-436 20010314; DK  
 2001-441 20010314; US  
 2001-275447P 20010314; US  
 2001-275448P 20010314

AN 2002-759837 [82] WPIDS  
 AB WO 2002072631 A UPAB: 20021220

NOVELTY - A new Major Histocompatibility Complex (MHC) molecule construct comprising a carrier molecule to which one or more MHC molecules are attached either directly or via one or more entities, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

following:

- (1) detecting the presence or MHC recognizing cells in a sample;
- (2) monitoring MHC recognizing cells;
- (3) establishing a prognosis of a disease involving MHC recognizing cells;
- (4) determining the status of, or the effectiveness of a medicament against, a disease involving MHC recognizing cells;
- (5) diagnosing a disease involving MHC recognizing cells;
- (6) a therapeutic composition comprising as active ingredient a MHC molecule construct;
- (7) up-regulating, down-regulating or modulating an immune response in an animal, including a human being;
- (8) treating an animal, including a human being;
- (9) inducing energy of a cell in animal, including a human being;
- (10) an adoptive cellular immunotherapeutic method;
- (11) obtaining MHC recognizing cells; or
- (12) producing a therapeutic composition.

ACTIVITY - Cytostatic; Antiinflammatory; Dermatological; Antiasthmatic; Antidiabetic; Anti-HIV; Virucide; Antiarteriosclerotic; Antiulcer; Antirheumatic; Antiarthritic; Antipsoriatic; Immunosuppressive. No biological data is given.

MECHANISM OF ACTION - Gene therapy.

USE - The MHC molecule construct is useful as a therapeutic composition in in vivo or ex vivo therapy, for treating, preventing, stabilizing or alleviating a disease involving MHC recognizing cells, for monitoring MHC recognizing cells or establishing a prognosis of a disease or diagnosing a disease, or determining the status of a disease or the effectiveness of a medicament against a disease, involving MHC recognizing cells, e.g., chronic inflammatory bowel disease such as Crohn's disease or ulcerative colitis, sclerosis, type I diabetes, rheumatoid arthritis, psoriasis, atopic dermatitis, asthma, malignant melanoma, renal carcinoma, breast cancer, lung cancer, cancer of the uterus, cervical cancer, prostate cancer, brain cancer, head and neck cancer, leukemia, cutaneous lymphoma, hepatic carcinoma, colorectal cancer, bladder cancer, rejection-related disease, Graft-versus-host-related disease, or a viral disease associated with hepatitis, Acquired Immunodeficiency Syndrome (AIDS), measles, pox, chicken pox, rubella or herpes. The MHC molecule construct is also useful for flow cytometric, histological or cytological method (all claimed.)

Dwg.0/57

L3 ANSWER 10 OF 12 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 1999-610208 [52] WPIDS  
DOC. NO. CPI: C1999-177599  
TITLE: Inducing human immunodeficiency virus-specific helper T-cell responses.  
DERWENT CLASS: B04 D16  
INVENTOR(S): WALKER, B D  
PATENT ASSIGNEE(S): (GEHO) GEN HOSPITAL CORP  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5972339	A	19991026 (199952)*		25	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5972339	A	US 1997-969721	19971113

PRIORITY APPLN. INFO: US 1997-969721

19971113

AN 1999-610208 [52] WPIDS

AB US 5972339 A UPAB: 19991210

NOVELTY - A method (X) for producing human immunodeficiency virus (HIV)-specific helper T-cell responses in animals using helper T-cell epitopes of peptides 112, 117, 118, 120, 121, 122, 125 and/or 127, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(i) a method (X) for producing a human immunodeficiency virus (HIV)-specific helper T-cell response in an animal, comprising:

(1) providing a polypeptide 8 to 50 amino acid residues in length comprising a helper T-cell epitope of the HIV capsid (which produces a stimulation index more than 10 in CD4+ cells in a subject chronically infected with HIV); and

(2) administering the polypeptide to produce a HIV-specific helper T-cell response; and

(ii) a composition (Y) comprising:

(1) a polypeptide 8 to 50 amino acid residues in length, comprising a helper T-cell epitope of peptide 112, 117, 118, 120, 121, 122, 125 and/or 127 (which have defined amino acid sequences ((I) -(VIII)) given in the specification); and

(2) an adjuvant.

ACTIVITY - Anti-HIV.

MECHANISM OF ACTION - Vaccine.

USE - (X) may be used for inducing HIV-specific helper T-cell responses in animals (preferably humans), especially those already chronically infected with HIV (i.e. inducing immunity by vaccination).

Dwg.0/5

L3 ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 1999220994 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10206153  
TITLE: Plakophilin, armadillo repeats, and nuclear localization.  
AUTHOR: Klymkowsky M W  
CORPORATE SOURCE: Molecular, Cellular and Developmental Biology, University of Colorado, Boulder 80309-0347, USA..  
klym@spot.colorado.edu  
CONTRACT NUMBER: GM54001 (NIGMS)  
SOURCE: Microscopy research and technique, (1999 Apr 1) 45 (1)  
43-54.  
JOURNAL code: 9203012. ISSN: 1059-910X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199907  
ENTRY DATE: Entered STN: 19990816  
Last Updated on STN: 19990816  
Entered Medline: 19990730

AB Plakophilins are armadillo-repeat containing proteins, identified through their localization to desmosomes. Expressed in a wide range of tissues, plakophilins are largely nuclear in most cell types [Schmidt et al. (1997) Cell Tissue Res 290:481; Mertens et al. (1996) J. Cell Biol 135:1009]. Using Xenopus embryos and cultured A6 cells, together with myc- and green fluorescent protein (GFP)-tags, we found that both the N-terminal, non-armadillo repeat "head" and the C-terminal armadillo repeat-containing regions can enter nuclei. The "arm" repeat domain is predominantly cytoplasmic and concentrated at the cell cortex, whereas the head and full-length polypeptides are concentrated in the nucleus. The head domain can also be seen to decorate and disrupt keratin filament network organization in some cells. In the course of these studies, we found that

the distribution of the myc-**epitope** and green fluorescence differed in fixed cells, e.g., while the green fluorescence of a myc- and GFP-tagged **head** domain polypeptide was usually exclusively nuclear, a substantial fraction of the myc-immunoreactivity was cytoplasmic. Treating cells with the translation inhibitor cycloheximide reduces the cytoplasmic myc-signal, suggesting that it represented nascent polypeptides awaiting folding and nuclear import. Based on these types of experiments, GFP can be seen as a marker of the distribution of the mature form of the tagged polypeptide.

L3 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 91107695 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 1703157  
TITLE: Differential localization of two epitopes of Escherichia coli ribosomal protein L2 on the large ribosomal subunit by immune electron microscopy using monoclonal antibodies.  
AUTHOR: Olson H M; Nag B; Etchison J R; Traut R R; Glitz D G  
CORPORATE SOURCE: Department of Biological Chemistry and Molecular Biology Institute, UCLA School of Medicine, University of California 90024.  
CONTRACT NUMBER: GM 17924 (NIGMS)  
GM 32769 (NIGMS)  
SOURCE: Journal of biological chemistry, (1991 Jan 25) 266 (3) 1898-902.  
Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199102  
ENTRY DATE: Entered STN: 19910329  
Last Updated on STN: 19980206  
Entered Medline: 19910227  
AB Two monoclonal antibodies (mAb), directed toward **different** epitopes of Escherichia coli ribosomal protein L2, have been used as probes in immune electron microscopy. mAb 5-186 recognizes an **epitope** within residues 5-186 of protein L2; it is seen to bind to 50 S subunits at or near the peptidyl transferase center, beside the subunit **head** on the L1 shoulder. mAb 187-272 recognizes an **epitope** within residues 187-272. This antibody binds to the face of the 50 S subunit, below the head and slightly toward the side with the stalk; this site is near the translocation domain. Both antibodies can bind simultaneously to single subunits. This indicates that protein L2 is elongated, reaching from the peptidyl transferase center to below the subunit head and approaching the translocational domain. The different locations of the two epitopes are consistent with previous biochemical results with the two antibodies (Nag, B., Tewari, D. S., Etchison, J. R., Sommer, A., and Traut, R. R. (1986) J. Biol. Chemical 261, 13892-13897).

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1 10 HEAD (S) DIFFERENT (S) EPITOPE  
L2 16 HEAD (S) DIFFER? (S) EPITOPE  
L3 12 DUP REM L2 (4 DUPLICATES REMOVED)

=> head (s) differ? (s) (ligand or receptor)

L4 288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)

=> (head (s) differ? (s) (ligand or receptor)) and tail  
L5 26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL

=> dup rem 15  
PROCESSING COMPLETED FOR L5  
L6 15 DUP REM L5 (11 DUPLICATES REMOVED)

=> t ti 16 1-15

L6 ANSWER 1 OF 15 MEDLINE on STN DUPLICATE 1  
TI Membrane-proximal {alpha}/{beta} stalk interactions differentially regulate integrin activation.

L6 ANSWER 2 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Determining whether treatment of a disorder with histone deacetylase inhibitors is to be started/continued or not, using antibody capable of binding to acetylated histone but not to deacetylated histone.

L6 ANSWER 3 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Nanoparticle useful as synthetic vaccine, comprises carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.

L6 ANSWER 4 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Epitopes formed by non-covalent association of conjugates, useful in therapeutic, prophylactic or diagnostic methods.

L6 ANSWER 5 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Detecting heterogeneous nucleic acid sequences in organisms and cells, useful for detecting and identifying genetically modified organisms or their products.

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation and electrochemical behavior of dinuclear platinum complexes containing NCN ligands (NCN = [C6H3(Me2NCH2)2-2,6]-). The crystal structure of [C6H3(Me2NCH2)2-1,3-(C.tplbnd.C)-5]2

L6 ANSWER 7 OF 15 MEDLINE on STN DUPLICATE 2  
TI The influence of stereoisomerism on the pharmacokinetics of Tc radiopharmaceuticals.

L6 ANSWER 8 OF 15 MEDLINE on STN DUPLICATE 3  
TI Selective targeting of human cells by a chimeric adenovirus vector containing a modified fiber protein.

L6 ANSWER 9 OF 15 MEDLINE on STN DUPLICATE 4  
TI Ligand recruitment by vinculin domains in transfected cells.

L6 ANSWER 10 OF 15 MEDLINE on STN DUPLICATE 5  
TI Synthesis and biological evaluation of a new reversely linked type of dual histamine H2 and gastrin receptor antagonist.

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and Characterization of Poly(benzoyl-1,4-phenylene)s. 2. Catalyst Coligand Effects on Polymer Properties

L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Cytosine nucleobase as a tridentate ligand: metal binding to N(3), N(4) and O(2) in trans-[(NH2Me)2Pt(dmcyt)2Ag2][NO3]2 (dmcyt = 1,5-dimethylcytosinate)

L6 ANSWER 13 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI CHARACTERIZATION OF 5-HT RECEPTOR SUBTYPES INVOLVED IN THE MOTOR BEHAVIORS PRODUCED BY INTRATHECAL ADMINISTRATION OF 5-HT AGONISTS IN RATS.

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
TI X-ray crystal structure and homonuclear phosphorus-31-phosphorus-31  $\sigma/J$ -resolved NMR spectroscopic studies of tetrakis (1,8-diisocyanomethane)bis(triphenylphosphine)dihydridium silver(3+) tris(hexafluorophosphate). Observation of a statistical mixture of "head/tail" isomers

L6 ANSWER 15 OF 15 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI The regional distribution of a morphine like factor enkephalin in monkey brain.

=> d ibib abs 16 1-3, 5

L6 ANSWER 1 OF 15 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2005329024 IN-PROCESS  
DOCUMENT NUMBER: PubMed ID: 15863495  
TITLE: Membrane-proximal  $\alpha/\beta$  stalk interactions differentially regulate integrin activation.  
AUTHOR: Kamata Tetsuji; Handa Makoto; Sato Yukiko; Ikeda Yasuo; Aiso Sadakazu  
CORPORATE SOURCE: Departments of Anatomy, Transfusion Medicine and Cell Therapy, and Internal Medicine, Keio University School of Medicine, Tokyo 160-8582, Japan.. kamata@sc.itc.keio.ac.jp  
SOURCE: Journal of biological chemistry, (2005 Jul 1) 280 (26) 24775-83. Electronic Publication: 2005-04-29. Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals  
ENTRY DATE: Entered STN: 20050628  
Last Updated on STN: 20050715  
AB The affinity of integrin-ligand interaction is regulated extracellularly by divalent cations and intracellularly by inside-out signaling. We report here that the extracellular, membrane-proximal  $\alpha/\beta$  stalk interactions not only regulate cation-induced integrin activation but also play critical roles in propagating inside-out signaling. Two closely related integrins,  $\alpha IIb\beta 3$  and  $\alpha V\beta 3$ , share high structural homology and bind to similar ligands in an RGD-dependent manner. Despite these structural and functional similarities, they exhibit distinct responses to Mn(2+). Although  $\alpha V\beta 3$  showed robust ligand binding in the presence of Mn(2+),  $\alpha IIb\beta 3$  showed a limited increase but failed to achieve full activation. Swapping alpha stalk regions between  $\alpha IIb$  and  $\alpha V$  revealed that the alpha stalk, but not the ligand-binding **head** region, was responsible for the **difference**. A series of  $\alpha IIb/\alpha V$  domain-swapping chimeras were constructed to identify the responsible domain. Surprisingly, the minimum component required to render  $\alpha IIb\beta 3$  susceptible to Mn(2+) activation was the  $\alpha V$  calf-2 domain, which does not contain any divalent cation-binding sites. The calf-2 domain makes interface with beta epidermal growth factor 4 and beta **tail** domain in three-dimensional structure. The effect of calf-2 domain swapping was partially reproduced by mutating the specific amino acid residues in the calf-2/epidermal growth factor 4-beta **tail** domain interface. When this interface was

constrained by an artificially introduced disulfide bridge, the Mn(2+)-induced alphaVbeta3-fibrinogen interaction was significantly impaired. Notably, a similar disulfide bridge completely abrogated fibrinogen binding to alphaIIb beta3 when alphaIIb beta3 was activated by cytoplasmic tail truncation to mimic inside-out signaling. Thus, disruption/formation of the membrane-proximal alpha/beta stalk interface may act as an on/off switch that triggers integrin-mediated bidirectional signaling.

L6 ANSWER 2 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-271984 [26] WPIDS  
 DOC. NO. NON-CPI: N2004-215240  
 DOC. NO. CPI: C2004-105664  
 TITLE: Determining whether treatment of a disorder with histone deacetylase inhibitors is to be started/continued or not, using antibody capable of binding to acetylated histone but not to deacetylated histone.  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): ARECES, L B; FARETTA, M; MACCARANA, M; MINUCCI, S; PELICCI, P G; PICCINI, D; RONZONI, S  
 PATENT ASSIGNEE(S): (GTWO-N) G2M CANCER DRUGS AG  
 COUNTRY COUNT: 107  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1403639	A1	20040331 (200426)*	EN	36	
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
WO 2004029622	A2	20040408 (200426)	EN		
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
AU 2003271663	A1	20040419 (200462)			
EP 1546712	A2	20050629 (200543)	EN		
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1403639	A1	EP 2002-21984	20020930
WO 2004029622	A2	WO 2003-EP10842	20030930
AU 2003271663	A1	AU 2003-271663	20030930
EP 1546712	A2	EP 2003-753482	20030930
		WO 2003-EP10842	20030930

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003271663	A1 Based on	WO 2004029622
EP 1546712	A2 Based on	WO 2004029622

PRIORITY APPLN. INFO: EP 2002-21984 20020930  
 AN 2004-271984 [26] WPIDS  
 AB EP 1403639 A UPAB: 20040421

NOVELTY - Determining (M1) whether treatment of disorder with histone deacetylase (HDAC) inhibitor is to be started/continued/not by contacting sample from tissue affected by disorder with antibody binding to acetylated histone but not to deacetylated histone, determining histone level acetylation in sample and classifying disorder as to be treated with HDAC inhibitor when histone acetylation level is significantly less than control sample.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) use of an antibody capable of binding to acetylated histone for determining whether a treatment of a disorder with an HDAC inhibitor is to be started/continued or not, and/or the classification of tumors;

(2) an antibody (I) capable of binding to peptides having a sequence of Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Gly-Ala-Lys- Arg (histone H4 tail, mono-acetylated at lysine 8) (S1) and Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Gly-Ala-Lys- Arg (histone H4 tail, mono-acetylated at lysine 12) (S2) but not to anyone of the peptides having the sequences of Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Ala-Lys- Arg (histone H4 tail, mono-acetylated at lysine 16) (S3), Ser-Gly-Arg-Gly-Lys-Gly-Gly-Lys-Gly-Leu-Gly-Lys-Gly-Ala-Lys- Arg (non-acetylated peptide) (S4), Ala-Val-Cys-Asp-Lys-Cys-Leu-Lys-Phe-Tyr-Ser-Lys and Val-Trp-Asp-Gln-Glu-Phe-Leu-Lys-Val-Asp-Gln-Gly;

(3) an antibody (II) capable of binding to peptides having (S1), (S2) and (S3) but not to peptides having (S4);

(4) an antibody produced by a hybridoma cell line chosen from hybridoma cell lines G2M-T25-H4ac and G2M-T52-ac deposited at DSMZ;

(5) a hybridoma cell line producing (I) or (II);

(6) a hybridoma cell line which has the identifying characteristics of the cell line G2M-T25-H4ac deposited at DSMZ;

(7) a hybridoma cell line which has the identifying characteristics of the cell line G2M-T52-ac deposited at DSMZ;

(8) a diagnostic kit (III) for determining the level of histone acetylation containing an antibody capable of binding to acetylated histone but not to deacetylated histone, an HDAC inhibitor, and optionally, a secondary antibody directed against the antibody, and optionally reagents for the measurement of a signal derived from an antibody binding to acetylated histones; and

(9) use of the antibodies T25 and/or T52 (IV) to direct substances conjugated to these antibodies to sites of histone hyperacetylation.

USE - (M1) is useful for determining whether a treatment of a disorder with an HDAC inhibitor is to be started/continued or not. The disorder is chosen from diseases in which the induction of hyperacetylation of histones has a beneficial effect resulting in **differentiation** and/or apoptosis of a patient's tumor cells, diseases that show aberrant recruitment of HDAC activity, conditions associated with abnormal gene expression, autoimmune diseases, and proliferative diseases such as skin cancer, melanoma, estrogen **receptor**-dependent and independent breast cancer, ovarian cancer, testosterone **receptor**-dependent and independent prostate cancer, renal cancer, colon and colorectal cancer, pancreatic cancer, bladder cancer, esophageal cancer, stomach cancer, genitourinary cancer, gastrointestinal cancer, uterine cancer, astrocytomas, gliomas, basal cancer and squamous cell carcinoma, sarcomas as Kaposi's sarcoma and osteosarcoma, **head** and neck cancer, small cell and non-small cell lung carcinoma, leukemia, lymphomas and other blood cell cancers or thyroid resistance syndrome (claimed).

Dwg.0/11

L6 ANSWER 3 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-167365 [16] WPIDS

DOC. NO. CPI: C2003-043494

TITLE: Nanoparticle useful as synthetic vaccine, comprises

carrier, and ligands displayed on the carrier, where ligands form polyvalent binding unit to produce interaction between nanoparticle and receptors on target.  
 DERWENT CLASS: B04 C06 D16  
 INVENTOR(S): BARGATZE, R F; CUTLER, J E; GLEE, P M; HAN, Y; JUTILA, J W; NAGY, J O; PASCUAL, D  
 PATENT ASSIGNEE(S): (BARG-I) BARGATZE R F; (CUTL-I) CUTLER J E; (GLEE-I) GLEE P M; (HANY-I) HAN Y; (JUTI-I) JUTILA J W; (NAGY-I) NAGY J O; (PASC-I) PASCUAL D; (LIGO-N) LIGOCYTE PHARM INC; (UYMO-N) UNIV MONTANA STATE-BOZEMAN  
 COUNTRY COUNT: 97  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002100325	A2	20021219 (200316)*	EN	56	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2003223938	A1	20031204 (200380)			
AU 2001297913	A1	20021223 (200452)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002100325	A2	WO 2001-US42712	20011015
US 2003223938	A1 Provisional	US 2000-239874P	20001013
	Cont of	WO 2001-US42712	20011015
		US 2003-412685	20030414
AU 2001297913	A1	AU 2001-297913	20011015

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001297913	A1 Based on	WO 2002100325

PRIORITY APPLN. INFO: US 2000-239874P 20001013; US 2003-412685 20030414

AN 2003-167365 [16] WPIDS

AB WO2002100325 A UPAB: 20030307

NOVELTY - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

DETAILED DESCRIPTION - A nanoparticle (I) comprising a carrier, a first ligand (L1), and a second ligand (L2), that is different than L1, both displayed on the carrier, is new. L1 and L2 form a polyvalent binding unit to produce a specific interaction between the nanoparticle and receptor(s) on a target under physiologically relevant shear conditions, and L2 interacts specifically with the receptor(s) based on its charge or hydrophobicity.

INDEPENDENT CLAIMS are also included for the following:

(1) a therapeutic formulation (II) in unit dose form comprising (I), to modulate a specific interaction between a cell or toxin and its receptor on a target in a host, where L1 is derived from or mimics a

ligand on the cell or toxin;

(2) a vaccine (III) comprising (I), where L1 is an epitope that is derived from a pathogen, pathogen-derived toxin or tumor cell, and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell;

(3) a diagnostic imaging agent comprising (I), and further comprising a contrast agent detectable by medical resonance imaging or other visualization techniques;

(4) a delivery vehicle (IV) comprising (I), and an agent to be delivered to the target;

(5) optimizing (V) a nanoparticle displaying polyvalent binding units having L1 and L2, comprises optimizing the amount of L1 on the nanoparticle under physiologically relevant shear conditions and holding the optimized amount of L1 constant, optimizing the amount of L2 under physiologically relevant shear conditions;

(6) a nanoparticle library (VI) comprising multiple polymer beads, where each bead contains several nanoparticles associated with the surface of the polymer bead, where all of the nanoparticles associated with any one bead display the same polyvalent binding unit;

(7) a vaccine comprising (I), and a polynucleotide sequence that encodes an epitope found on a pathogen or a tumor cell and the vaccine is formulated to elicit a protective immune response against that pathogen or tumor cell; and

(8) a nanoparticle produced by (VI).

ACTIVITY - Antibacterial; Fungicide; Virucide; Protozoacide; Anti-HIV; Immunostimulant; Antiinflammatory; Cytostatic.

MECHANISM OF ACTION - Vaccine; Inhibitor of lymphocyte attachment in Peyer's patch.

A variation on the Peyer's patch method was used to examine the P-selectin-mediated adhesion in a mouse mesentery venule model. A lateral incision was made into the abdominal wall to allow the small intestine to be externalized. The intestine was positioned for microscopic examination of the mesentery. A solution of PMA in phosphate buffered saline was superfused directly onto the mesentery to allow for upregulation of P-selectin in the endothelium of the mesentery venules. The area of the incision was treated and cannulation of the tail vein was performed. A variable dose of carbohydrate- and sulfate-displaying nanoparticle was administered. The results showed the reduction in number of leukocyte rolling and sticking events compared to the untreated control, and the increase in cell velocity relative to the untreated control. At the highest dosage tested (2.3 mg/kg of carbohydrate), there was a greater than 65% reduction in the number of rolling/sticking leukocytes and a nearly 90% increase in the rolling velocity, over the control.

USE - (I) is useful for sequestration of toxins in the bloodstream of a host, by administering (I) to bind a circulating toxin or toxic metabolic product, where the first ligand is derived from or mimics a receptor that specifically binds to the toxin or toxic metabolic product. The binding is effective to produce an effect such as decreased inflammation, decreased systemic toxicity, chelation therapy, neutralization of pathogens, inhibition of metastasis, inhibition of drug intoxication, tissue regeneration, selective cellular differentiation and proliferation. (I) is also useful in a diagnostic method by allowing (I) to bind to a toxin or pathogen or an antibody against such toxins or pathogens and then detecting nanoparticles bound to such toxins, pathogen or antibodies. (III) is formulated to elicit a protective immune response against a pathogen such as *Escherichia coli*, *Candida albicans*, *Brucella* sp., *Salmonella* sp., *Shigella* sp., *Pseudomonas* sp., *Bordetella* sp., *Clostridium* sp., group B strep, *E.coli* 0157, Norwalk virus, anthrax, human immunodeficiency virus (HIV), sexually transmitted diseases (STDs), Chlamydia, hepatitis B virus (HBV), malaria, cell wall proteins of *Candida* sp., and GB3 toxin from *E.coli* 0157. (IV) is useful for delivering an

agent such as therapeutic or cytotoxic agent to a target. (VI) is useful for screening agents, by adding at least one candidate agent to the nanoparticle library, and detecting binding of the agent to any one or more polymer beads in the library. The candidate agent comprises a detectable label and acts as a reporter to L1. Vaccine construct comprising (I) is useful for delivering nanoparticle therapeutic molecules to an animal (all claimed).

The polymerized nanoparticle constructs and assemblies are useful as modulators, inhibitors and enhancers and drug delivery agents for a variety of interactions as well as their down-stream effects, such as pathogen-cell attachment, pathogen-derived-toxin-cell attachment, cell-cell attachment mediated diseases, integrin adhesions, complement fixation and chemokine-mediated events. The nanoparticles are readily used as synthetic vaccines.

Dwg.0/6

L6 ANSWER 5 OF 15 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2002-098663 [14] WPIDS  
 DOC. NO. CPI: C2002-030908  
 TITLE: Detecting heterogeneous nucleic acid sequences in organisms and cells, useful for detecting and identifying genetically modified organisms or their products.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): BERNAUER, H; BERNAUER, H S  
 PATENT ASSIGNEE(S): (BERN-I) BERNAUER H; (BERN-I) BERNAUER H S  
 COUNTRY COUNT: 97  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 10027218	A1	20011206 (200214)*		11	
WO 2001098533	A2	20011227 (200214)	GE		
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001070545	A	20020102 (200230)			
EP 1315834	A2	20030604 (200337)	GE		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 10027218	A1	DE 2000-10027218	20000531
WO 2001098533	A2	WO 2001-EP6198	20010531
AU 2001070545	A	AU 2001-70545	20010531
EP 1315834	A2	EP 2001-949371	20010531
		WO 2001-EP6198	20010531

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001070545	A Based on	WO 2001098533
EP 1315834	A2 Based on	WO 2001098533

PRIORITY APPLN. INFO: DE 2000-10027218 20000531  
 AN 2002-098663 [14] WPIDS

AB DE 10027218 A UPAB: 20020301

NOVELTY - Simultaneously detecting one or more heterogeneous nucleic acids (I), introduced into organisms and cells, where (I) includes at least one artificial sequence (II) that allows both determination of the identity of (I) and selective replication, and (II) are detected, and optionally identified, by hybridization to a chip and/or by sequencing, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a chip for use in the new process.

USE - The method is used (i) for detection/identification of genetically modified organisms and vectors (or their products), e.g. in foods or for detecting improper use and (ii) for correlating phenotypical features with particular regions of chromosomes.

ADVANTAGE - This method provides simple, rapid, inexpensive and unequivocal identification and detection of genetically modified organisms and vectors. (II) can be detected independently of the type of construct containing it.

Dwg.0/2

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

114.94 115.15

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> fil medline biosis caplus embase wpids

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

0.24 115.39

FILE 'MEDLINE' ENTERED AT 16:12:12 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 16:12:12 ON 22 JUL 2005

Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 16:12:12 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 16:12:12 ON 22 JUL 2005

COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> amphipathic and tail and (head (s) conjugat?)

L7 0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)

=> tail and (head (s) conjugat?)

L8 113 TAIL AND (HEAD (S) CONJUGAT?)

=> (bilayer or membrane) and tail and (head (s) conjugat?)

L9 24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)

=> dup rem 19

PROCESSING COMPLETED FOR L9

L10 11 DUP REM L9 (13 DUPLICATES REMOVED)

=> t ti l10 1-11

L10 ANSWER 1 OF 11 MEDLINE on STN DUPLICATE 1  
TI Protein circlets as sex pilus subunits.

L10 ANSWER 2 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Liposome useful for treating angiogenesis comprises a conjugate containing a vesicle-forming lipid and a non-biological, biomimetic antagonist, bound to its lipid **bilayer**.

L10 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Crystal structure of 9-(hexadecyl)imino-4,5-diazafluorene

L10 ANSWER 4 OF 11 MEDLINE on STN DUPLICATE 2  
TI Conjugates of synthetic cyclic peptides elicit bactericidal antibodies against a conformational epitope on a class 1 outer **membrane** protein of *Neisseria meningitidis*.

L10 ANSWER 5 OF 11 MEDLINE on STN DUPLICATE 3  
TI Binding of metallothionein to rat spermatozoa.

L10 ANSWER 6 OF 11 MEDLINE on STN DUPLICATE 4  
TI Relationship between fertilizing ability of frozen human spermatozoa and capacity for heparin binding and nuclear decondensation.

L10 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **MEMBRANE** SPECIALIZATIONS IN THE PAIRED SPERMATOZOA OF DYTISCID WATER BEETLES.

L10 ANSWER 8 OF 11 MEDLINE on STN DUPLICATE 5  
TI Distinct cytoskeletal domains revealed in sperm cells.

L10 ANSWER 9 OF 11 MEDLINE on STN DUPLICATE 6  
TI The features of sperm maturation in the epididymis of a marsupial, the brushtailed possum *Trichosurus vulpecula*.

L10 ANSWER 10 OF 11 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
TI The features of sperm maturation in the epididymis of a marsupial, the brushtailed possum *Trichosurus vulpecula*.

L10 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Molecular probes of spermatozoan structures

=> d ibib abs l10 2,4,

L10 ANSWER 2 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-666793 [71] WPIDS

DOC. NO. CPI: C2002-187111

TITLE: Liposome useful for treating angiogenesis comprises a conjugate containing a vesicle-forming lipid and a non-biological, biomimetic antagonist, bound to its lipid **bilayer**.

DERWENT CLASS: A96 B05 B07

INVENTOR(S): ELENS, H M; MONCK, M A; YEH, P

PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP; (ELLE-I) ELENS H M; (MONC-I) MONCK M A; (YEHP-I) YEH P

COUNTRY COUNT: 98

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002036073	A2	20020510 (200271)*	EN	44	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2002025878	A	20020515 (200271)			
EP 1341497	A2	20030910 (200367)	EN		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 2004013720	A1	20040122 (200407)			
JP 2004512345	W	20040422 (200428)		81	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002036073	A2	WO 2001-US46206	20011029
AU 2002025878	A	AU 2002-25878	20011029
EP 1341497	A2	EP 2001-992551	20011029
US 2004013720	A1	WO 2001-US46206	20011029
US 2004013720	A1	WO 2001-US46206	20011029
JP 2004512345	W	US 2003-415160	20030425
JP 2004512345	W	WO 2001-US46206	20011029
JP 2004512345	W	JP 2002-538885	20011029

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002025878	A Based on	WO 2002036073
EP 1341497	A2 Based on	WO 2002036073
JP 2004512345	W Based on	WO 2002036073

PRIORITY APPLN. INFO: US 2000-245140P 20001102; US  
2003-415160 20030425

AN 2002-666793 [71] WPIDS

AB WO 200236073 A UPAB: 20030813

NOVELTY - A liposome comprises a **conjugate** bound to its lipid **bilayer**. The **conjugate** comprises a vesicle-forming lipid having a polar **head** group and a hydrophobic **tail**, and a non-biological, biomimetic antagonist (A1) to a receptor upregulated at a disease site, directly or indirectly chemically linked to the polar **head** group of the vesicle-forming lipid.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) The conjugate useful for preparing a targeted liposomes; and  
(2) Use of the liposome in the manufacture of a medicament in the treatment of a disease caused by upregulation of the receptor.

ACTIVITY - Vasotropic; osteopathic; antiarthritic; anti-rheumatic; anti-diabetic; antipsoriatic; and cytostatic.

MECHANISM OF ACTION - In vitro alpha v beta 3 and alpha v beta 5 binder.

Disteararylphosphatidylethanolamine-polyethylene glycol-vitronectin receptor antagonist (DSPE-PEG-VRA) was synthesized by reacting (7-((4-amino-butyl)-(1H-benzimidazol-2-ylmethyl)-carbamoyl)-4-methyl-3-

oxo-2,3,4,5-tetrahydro-1H-benzo(e)(1,4)diazepin-2-yl)-acetic acid (VRA) (50 mg) with DSPE-PEG-NHS in DMSO (10 ml). Excess amount of VRA (1.2 times molar excess) was used. The VRA was completely dissolved in DMSO. DSPE-PEG-NHS pre-dissolved in DMSO was added dropwise to the VRA solution. The resulting reaction mixture was stirred overnight in the dark at room temperature. The unreacted DSPE-PEG-NHS was quenched by the addition of excess glycine (5 times molar excess). The reaction mixture was diluted with 0.1M MES (morpholino ethanesulfonic acid) saline buffer (pH 5.8) and then dialyzed against the MES buffer (pH 5.8) to remove by-product, DMSO, and unreacted VRA. At this point the unreacted DSPG-PEG-NHS was hydrolyzed into DSPE-PEG-COOH. The resulting mixture was then dialyzed and lyophilized to form DSPE-PEG-VRA (VRA-lipid conjugate) (A). A liposome (L1) was tested for its binding affinity to human alpha v beta 3 or alpha v beta 5 using an in vitro solid phase binding assay described by Wong A, Hwang SM, McDevitt P, McNulty D, Stadel JM and Johanson K, studies on alpha v beta 3/ligand interaction using a (3H) SK and F-107260 binding assay (1996) Molecular pharmacology 50 (3):529 - 537. A control composition comprised cholesterol (40), PEG3400 DSPE (pegylated DSPE) (7) and POPC (53) was tested for the same binding test as that of the test conjugate. The binding affinity Ki (nm) of the test/control composition was 31/no binding effect.

USE - In the manufacture of a medicament for the treatment of diseases caused by upregulation of integrin and vitronectin receptor e.g. angiogenesis including restenosis, osteoarthritis, rheumatoid arthritis, diabetic retinopathy, hemangiomas, psoriasis and cancerous tumor (all claimed).

ADVANTAGE - The antagonist has binding affinity to the upregulation receptor, which is upregulated in the vascular endothelium of inflammation, infection or tumor sites.

Dwg.0/0

L10 ANSWER 4 OF 11	MEDLINE on STN	DUPLICATE 2
ACCESSION NUMBER:	95369902 MEDLINE	
DOCUMENT NUMBER:	PubMed ID: 7543883	
TITLE:	Conjugates of synthetic cyclic peptides elicit bactericidal antibodies against a conformational epitope on a class 1 outer <b>membrane</b> protein of <i>Neisseria meningitidis</i> .	
AUTHOR:	Hoogerhout P; Donders E M; van Gaans-van den Brink J A; Kuipers B; Brugghe H F; van Unen L M; Timmermans H A; ten Hove G J; de Jong A P; Peeters C C; +	
CORPORATE SOURCE:	Laboratory of Vaccine Development and Immune Mechanisms, National Institute of Public Health and Environmental Protection, Bilthoven, The Netherlands.	
SOURCE:	Infection and immunity, (1995 Sep) 63 (9) 3473-8. Journal code: 0246127. ISSN: 0019-9567.	
PUB. COUNTRY:	United States	
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)	
LANGUAGE:	English	
FILE SEGMENT:	Priority Journals	
ENTRY MONTH:	199509	
ENTRY DATE:	Entered STN: 19950930 Last Updated on STN: 19960129 Entered Medline: 19950921	
AB	Bactericidal antibodies directed against surface loops of class 1 outer <b>membrane</b> proteins play a crucial role in protection against meningitis and sepsis caused by <i>Neisseria meningitidis</i> . So far, all efforts to obtain protective antibodies against these apparently conformational epitopes by using linear peptide analogs have been in vain. In this study, <b>conjugates of head-to-tail</b> cyclic peptides encompassing the predicted top of a protective surface loop were used for immunization. A series of 18 cyclic peptides with a ring size ranging from 7 to 17 residues, conjugated to tetanus toxoid, was	

investigated. Antipeptide and anti-whole-cell immunoglobulin G (IgG) titers elicited by the conjugates were determined. Conjugates of three peptides, containing 14, 15, and 17 amino acid residues (peptides 7, 12, and 13, respectively), induced an anti-whole-cell titer when Quillaja saponin A was used as the adjuvant. When alum was used as the adjuvant, the conjugate of peptide 12 did not elicit an anti-whole-cell response. From the Quillaja saponin A group, some of the sera obtained with conjugates of peptides 7 and 12 and all sera obtained with the peptide 13 conjugate were bactericidal in vitro. None of the sera evoked with alum as the adjuvant showed bactericidal activity. Nonbactericidal sera contained IgG1 primarily, whereas bactericidal sera showed significant titers of IgG2a and IgG2b. Class 1 protein-derived synthetic cyclic peptides which are capable of eliciting bactericidal antibodies, such as peptide 13 derived from meningococcal strain H44/76, represent potential candidates for a (semi)synthetic vaccine against meningococcal disease.

=> FIL STNGUIDE			
COST IN U.S. DOLLARS		SINCE FILE	TOTAL
		ENTRY	SESSION
FULL ESTIMATED COST		38.62	154.01

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
 AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1	10 HEAD (S) DIFFERENT (S) EPITOPE
L2	16 HEAD (S) DIFFER? (S) EPITOPE
L3	12 DUP REM L2 (4 DUPLICATES REMOVED)
L4	288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)
L5	26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL
L6	15 DUP REM L5 (11 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

L7	0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)
L8	113 TAIL AND (HEAD (S) CONJUGAT?)
L9	24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)
L10	11 DUP REM L9 (13 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005

=> fil medline biosis caplus embase wpids			
COST IN U.S. DOLLARS		SINCE FILE	TOTAL
		ENTRY	SESSION
FULL ESTIMATED COST		0.72	154.73

FILE 'MEDLINE' ENTERED AT 16:24:09 ON 22 JUL 2005

FILE 'BIOSIS' ENTERED AT 16:24:09 ON 22 JUL 2005

Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 16:24:09 ON 22 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 16:24:09 ON 22 JUL 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 16:24:09 ON 22 JUL 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> 18 not 19  
L11 89 L8 NOT L9

=> dup rem l11  
PROCESSING COMPLETED FOR L11  
L12 75 DUP REM L11 (14 DUPLICATES REMOVED)

=> t ti l12 1-50

L12 ANSWER 1 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Nucleic acid strand invasion to destabilize double-stranded nucleic acid  
hybridization comprises utilizing uracil-DNA glycosylase or an enzyme  
comprising a DNA N-glycosylase activity.

L12 ANSWER 2 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Isolated or synthesized composition, useful for diagnosing and treating  
bladder disorders and cancer, comprises urinary bladder antiproliferative  
factor having sugar moieties linked to hydrophobic moiety.

L12 ANSWER 3 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric conductive composition used to modify charge transport across  
nanocrystal surface, comprises functionalized head group capable of  
binding to nanostructure surface.

L12 ANSWER 4 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Knife bayonet.

L12 ANSWER 5 OF 75 MEDLINE on STN DUPLICATE 1  
TI New insight into solvent effects on the formal HOO\* + HOO\* reaction.

L12 ANSWER 6 OF 75 MEDLINE on STN DUPLICATE 2  
TI Effect of structural factors on the stability of duplexes formed by  
oligonucleotide conjugates with minor groove binders.

L12 ANSWER 7 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Effect of structural factors on the stability of duplexes formed by  
oligonucleotide conjugates with minor groove binders

L12 ANSWER 8 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3  
TI Organic species that facilitate charge transfer to or from nanostructures

L12 ANSWER 9 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
TI Combinatorial library of cyclic peptides as antibacterial agents

L12 ANSWER 10 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Injectable liposomal composition for delivery of a water-soluble substance  
e.g. vaccine for preventing pregnancy, comprises several liposomal  
vesicles comprising a high weight ratio of lipid to encapsulated  
water-soluble substance.

- L12 ANSWER 11 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Galvanic cell, e.g. microbattery, has cathode and anode having respective vesicle comprising benzoquinone or hydroquinone, electroactive species encapsulated into the vesicles, conducting substrate, and functionalized tethers.
- L12 ANSWER 12 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Method reducing bottom resistance of artillery projectile and gear for its implementation.
- L12 ANSWER 13 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Alkyl-substituted thieno[3,2-b]thiophene polymers and their dimeric subunits
- L12 ANSWER 14 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Cobalt-catalyzed dimerization of alkenes
- L12 ANSWER 15 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Direct observation of the ordering and molecular folding of poly[(m-phenylenevinylene)-co-(2,5-dioctyloxy-p-phenylenevinylene)]
- L12 ANSWER 16 OF 75 MEDLINE on STN DUPLICATE 5  
TI A high-spin and durable polyyradical: poly(4-diphenylaminium-1,2-phenylenevinylene).
- L12 ANSWER 17 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Solvatochromic, thermochromic and photoluminescent properties of poly(3-octylthiophene)
- L12 ANSWER 18 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Soft propylene resin composition for films and sheets comprises stereoblock propylene polymer containing isotactic block, and propylene-ethylene copolymer.
- L12 ANSWER 19 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Preparation of vulcanizable composition for tire tread comprises forming premix including processing aids and rubber and mixing premix with carbon black.
- L12 ANSWER 20 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Immobilization of electroactive polymerized vesicles to conducting substrate in electrode of microbattery comprises allowing suspension of vesicles to contact substrate in the presence of functionalized tether.
- L12 ANSWER 21 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Alpha-olefin terpolymer comprises aliphatic alpha-olefins, and vinyl aromatic monomers optionally substituted by alkyl radicals, and contains block(s) of three vinyl aromatic monomers in head-tail-tail insertion fashion.
- L12 ANSWER 22 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Frolov's bullet.
- L12 ANSWER 23 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Percussive-indexing mechanism.
- L12 ANSWER 24 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Regioregular **Head-to-Tail** Poly(4-alkylquinoline)s: Synthesis, Characterization, Self-Organization, Photophysics, and Electroluminescence of New n-Type **Conjugated** Polymers

- L12 ANSWER 25 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI On the structural effects of the **head-to-tail** coupled oligo(3-alkylthiophenes) on their optical properties
- L12 ANSWER 26 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Generating a modified protein with reduced antigenicity for treating cancer, AIDS, autoimmune diseases, comprises identifying a protein region antigenic in the first subject using antiserum from either the first or a second subject.
- L12 ANSWER 27 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New n-type polythiophene composition for fabricating thin film field effect transistors.
- L12 ANSWER 28 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Bullet of sporting gun cartridge for rifled weapon.
- L12 ANSWER 29 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Poly(1,2-phenylenevinylene) Ferromagnetically 3,5-Bearing Phenoxy Radicals
- L12 ANSWER 30 OF 75 MEDLINE on STN DUPLICATE 6  
TI Design and synthesis of a 256-membered **pi-conjugated** oligomer library of regioregular **head-to-tail** coupled quater(3-arylthiophene)s.
- L12 ANSWER 31 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7  
TI Epitopes formed by non-covalent association of conjugates
- L12 ANSWER 32 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Sequence Length Distributions (Microstructure) of Regioregular Poly(3-alkylthiophene)s and Related Conjugated Polymers and Their Use in Simulating  $\pi-\pi^*$  Absorption Peak Profiles
- L12 ANSWER 33 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Poly(3-phenylgalvinoxylthiophene). A new conjugated polyyradical with high spin concentration
- L12 ANSWER 34 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Undular jump in open-channel flow over a sill
- L12 ANSWER 35 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation and characterization of regioregular **head-to-tail**  $\pi$ - **conjugated** poly(pyridine-2,5-diyl)s
- L12 ANSWER 36 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Use of asialo-glycoproteins for treating liver disease, e.g. viral hepatitis, and targeting a glycoprotein to a hepatocyte.
- L12 ANSWER 37 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Grinding head.
- L12 ANSWER 38 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Copolymer of aromatic vinyl, olefin, and non-conjugated diene having improved mechanical strength, elasticity and transparency.
- L12 ANSWER 39 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Ferromagnetic Spin Alignment in Head-to-Tail Coupled Oligo(1,4-phenyleneethynylene)s and Oligo(1,4-phenylenevinylene)s Bearing Pendant p-Phenylenediamine Radical Cations
- L12 ANSWER 40 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN

- TI Two-dimensional crystals of poly(3-alkylthiophene)s: direct visualization of polymer folds in submolecular resolution
- L12 ANSWER 41 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Preparation of Conjugated Gels of Regioregular HT Sexi(3-n-octylthiophene) and Related Star Molecules
- L12 ANSWER 42 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI  $\pi$ -Conjugated polymers prepared by organometallic polycondensation and metal complexes of the polymers
- L12 ANSWER 43 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Regioregular polymerization of 3-semifluoroalkylthiophenes.
- L12 ANSWER 44 OF 75 MEDLINE on STN DUPLICATE 8  
TI Synthesis of a single-tailed cationic lipid and investigation of its transfection.
- L12 ANSWER 45 OF 75 MEDLINE on STN DUPLICATE 9  
TI The Xenopus Emx genes identify presumptive dorsal telencephalon and are induced by head organizer signals.
- L12 ANSWER 46 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Lubricating oil for mitigating sludge formation in engine oil - contains a minor amount of alkyl substituted hydroxy aromatic compound formed by alkylation of ethylene -alpha-olefin copolymer.
- L12 ANSWER 47 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and characterization of poly[3-(butylthio)thiophene]: a regioregular head-to-tail polymer
- L12 ANSWER 48 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Use of nucleic acid ligands in flow cytometry
- L12 ANSWER 49 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 10  
TI Living Polymerization of (*o*-(Trimethylsilyl)phenyl)acetylene by Molybdenum Imido Alkylidene Complexes
- L12 ANSWER 50 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Solvent effect on the bathochromic shifts of push-pull dihexylbithiophenes with head-to-head and head-to-tail orientations

=> t ti l12 51-75

- L12 ANSWER 51 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Electroluminescence of regioregular poly(alkylthiophenes)
- L12 ANSWER 52 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Thiophene:alkylthiophene copolymers from substituted dialkyloligothiophenes
- L12 ANSWER 53 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI A dramatic conjugational interchange in the regioregular polythiophene, HT-poly(3-[2,5,8-trioxanonyl]thiophene) via a chemoselective recognition response
- L12 ANSWER 54 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Mercurophilic 1-(8,8-dicyanoheptafulven-3-yl)aza-15-crown-5 ether. Synthesis, x-ray structural analysis, and fixation of its derivative on a polymer

- L12 ANSWER 55 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI The effect of stereoregularity on the structure of poly(octylthiophene): an x-ray diffraction study
- L12 ANSWER 56 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Site-specific immunoconjugates
- L12 ANSWER 57 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Conducting polymers from anodic coupling of some regiochemically defined dialkoxy-substituted thiophene oligomers
- L12 ANSWER 58 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI The tuning of **conjugation** by recipe: the synthesis and properties of random **head-to-tail** poly(3-alkylthiophene) copolymers
- L12 ANSWER 59 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric nonlinear optical material - contains functional gps. at both ends which can form hydrogen bond in **head-to-tail** form, and does not cause relaxation or orientation.
- L12 ANSWER 60 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Synthesis and physical properties of self-orienting **head-to-tail** polythiophenes
- L12 ANSWER 61 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Toward tuning electrical and optical properties in **conjugated** polymers using side-chains: highly conductive **head-to-tail**, heteroatom functionalized polythiophenes
- L12 ANSWER 62 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Low-temperature magnetic properties for poly(3-alkylthiophenes) and poly(4,4'-dialkyl-2,2'-bithiophenes)
- L12 ANSWER 63 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Polyazomethine conjugated polymer film with second-order nonlinear optical properties fabricated by electric-field-assisted chemical vapor deposition
- L12 ANSWER 64 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Reactions proceeding via the reactive intermediate  $\alpha$ -vinyl-p-xylylene. Contrasting orientations in the formation of cyclic dimers and polymer
- L12 ANSWER 65 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Structural and quantitative analysis of surface modified poly(vinylidene fluoride) films using ATR FT-IR spectroscopy
- L12 ANSWER 66 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Variable teeth angle reamer - has calibrating section with land widening from head to **tail** end while front angle of teeth decreases.
- L12 ANSWER 67 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Improving colour of aromatic thermoplastic polymer - by treatment with peroxy cpd..
- L12 ANSWER 68 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI The Michael induced Ramberg-Baeklund homologation to conjugated isoprenoids
- L12 ANSWER 69 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Electroinitiated polymerization through acetylene and nitrile group bonds

L12 ANSWER 70 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Thermal and radiation-induced dehydrochlorination of poly(vinyl chloride).  
II. Head-to-head structures

L12 ANSWER 71 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Structure and stereochemistry of nucleic acid components and their reaction products. III. Crystal structure of the potassium salt of N-(purin-6-ylcarbamoyl)-L-threonine. Possible role of hypermodified bases adjacent to anticodon in codon-anticodon interaction

L12 ANSWER 72 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Polymer microstructure

L12 ANSWER 73 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Molecular-orbital theory of reactivity in radical polymerization. II

L12 ANSWER 74 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Long-chain acids. I. Extension of the isoprene rule

L12 ANSWER 75 OF 75 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Cordless tyre - with tread of ethylene/propylene/diene terpolymer, and sidewall of segmented copolyester.

=> d ibib abs 112 44,48,56

L12 ANSWER 44 OF 75 MEDLINE on STN DUPLICATE 8  
ACCESSION NUMBER: 1999459173 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10528072  
TITLE: Synthesis of a single-tailed cationic lipid and investigation of its transfection.  
AUTHOR: Tang F; Hughes J A  
CORPORATE SOURCE: University of Florida, College of Pharmacy, Department of Pharmaceutics, Gainesville, FL 32610, USA.  
CONTRACT NUMBER: PO1-AG10485 (NIA)  
R29-H 1 55779  
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (1999 Dec 6) 62 (3) 345-58.  
Journal code: 8607908. ISSN: 0168-3659.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199912  
ENTRY DATE: Entered STN: 20000113  
Last Updated on STN: 20000113  
Entered Medline: 19991216  
AB Single-tailed cationic lipids were originally reported to have low transfection efficiency and high toxicity in plasmid delivery. We hypothesized that particular single-tailed cationic lipids may also function in plasmid transfection. To test this hypothesis, we synthesized a new cationic lipid-oleoyl ornithinate (OLON). To decrease cytotoxicity, we then introduced a potential biodegradable ester bond in the tail of lipid yielding 6-lauroxyhexyl ornithinate (LHON). The data demonstrated that the cytotoxicity of LHON was lower than that of 1,2-dioleoyl-3-trimethylammonium-propane (DOTAP) or OLON. To investigate the transfection activity of the new lipids and determine the cellular uptake of DNA/liposome complexes, we compared the transfection of liposomes produced from double-tailed 1',2'-dioleyl-sn-glycero-3'-succinyl-1, 6-hexanediol ornithine conjugate (DOGSHDO) with an ornithine headgroup, single-tailed OLON with an ornithine head group, double-tailed DOTAP with quaternary amine group, and single-tailed

cetyltrimethylammonium bromide (CTAB) with a quaternary amine group. At the optimal ratios as defined in transfection experiments, OLON/DOPE had more than 10 times the transgene expression than other liposomes even though the DNA uptake was not necessarily greater. In the experiments comparing the release of DNA from DNA/liposome complexes by anionic substances, a greater fraction of DNA was released from DNA/OLON/DOPE complexes than that from DNA/DOTAP/DOPE complexes.

L12 ANSWER 48 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1997:145215 CAPLUS  
 DOCUMENT NUMBER: 126:141764  
 TITLE: Use of nucleic acid ligands in flow cytometry  
 INVENTOR(S): Davis, Ken; Jayasena, Sumedha; Gold, Larry  
 PATENT ASSIGNEE(S): Nexstar Pharmaceuticals, Inc., USA; Becton Dickinson and Company  
 SOURCE: PCT Int. Appl., 38 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 127  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641019	A1	19961219	WO 1996-US8089	19960530
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML				
US 5853984	A	19981229	US 1995-479729	19950607
AU 9661470	A1	19961230	AU 1996-61470	19960530
EP 832299	A1	19980410	EP 1996-919017	19960530
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AU 773741	B2	20040603	AU 2001-18257	20010202
AU 773815	B2	20040610	AU 2001-29834	20010323
PRIORITY APPLN. INFO.:			US 1995-479729	A 19950607
			US 1990-536428	B2 19900611
			AU 1991-82061	A0 19910610
			US 1991-714131	A2 19910610
			US 1992-964624	A2 19921021
			US 1994-199507	A2 19940222
			US 1994-234997	A2 19940428
			AU 1996-58839	A3 19960530
			WO 1996-US8089	W 19960530
			AU 1996-61611	A3 19960604

AB This invention discloses the use of SELEX-developed high-affinity oligonucleotide ligands in flow cytometry diagnostic applications. Specifically, DNA ligands having one or more fluorophore mols. attached are disclosed which are useful in flow cytometry.

L12 ANSWER 56 OF 75 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1996:83878 CAPLUS  
 DOCUMENT NUMBER: 124:172723  
 TITLE: Site-specific immunoconjugates  
 AUTHOR(S): Werlen, R. C.; Lankinen, M.; Smith, A.; Chernushevich, I.; Standing, K. G.; Blakey, D. C.; Shuttleworth, H.; Melton, R. G.; Offord, R. E.; Rose, K.  
 CORPORATE SOURCE: Dep. Biochim. Med., Centre Med. Univ., Geneca, CH-1211, Switz.

SOURCE: Tumor Targeting (1995), 1(5), 251-8  
CODEN: TUTAF9; ISSN: 1351-8488  
PUBLISHER: Chapman & Hall  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
AB A review and discussion with 19 refs. The conjugation of two proteins with different activities in order to get a conjugate with a new hybrid activity is a field of intense investigation. The standard way of preparing such conjugates uses random acylation of lysine side-chains with heterobifunctional reagents, leading to a mixture of conjugates where both protein partners are linked to one another in different orientations. To circumvent this difficulty, we are developing precise conjugation techniques for the preparation of site-specific protein conjugates. Here we review the preparation, characterization and the use of three such site-specific immunoconjugates: an antibody fragment-enzyme conjugate designed for ADEPT (antibody-directed enzyme prodrug therapy) and two F(ab')3 constructions prepared with different linkers. The ADEPT conjugate is a **head-to-tail conjugate** between an F(ab')3 antibody fragment and the enzyme carboxypeptidase G2 (CPG2). The components are linked through the formation of a hydrazone bond between a carbohydrazide, introduced at the C-terminus of the truncated heavy chain of the antibody fragment by reverse proteolysis, and an aldehyde, obtained by mild periodate oxidation of a threonine introduced at the N-terminus of the CPG2 by genetic engineering. This conjugate has been characterized by ESI-TOF (electrospray ionization time of flight) mass spectrometry and its *in vitro* and *in vivo* behavior was compared with that of a corresponding random conjugate. For the preparation of both F(ab')3 constructions, an Fab with a single thiol group was first prepared by digestion with appropriate proteases. In the first case, the thiol was then converted to an aminoxy group. A trivalent construct was then obtained by polyoxime formation with a trialdehyde template. This F(ab')3 has been characterized by ESI-TOF mass spectrometry and its biodistribution in tumor-bearing mice has been investigated. The second F(ab')3 was obtained starting with the same Fab, but the trivalent construct was prepared on a template containing two aldehydes and a maleimide group, allowing the introduction of three Fab in three different steps.

=> d his

(FILE 'HOME' ENTERED AT 15:58:16 ON 22 JUL 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 15:58:37 ON 22 JUL 2005

L1 10 HEAD (S) DIFFERENT (S) EPITOPE  
L2 16 HEAD (S) DIFFER? (S) EPITOPE  
L3 12 DUP REM L2 (4 DUPLICATES REMOVED)  
L4 288 HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)  
L5 26 (HEAD (S) DIFFER? (S) (LIGAND OR RECEPTOR)) AND TAIL  
L6 15 DUP REM L5 (11 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:09:56 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:12:12 ON 22 JUL 2005

L7 0 AMPHIPATHIC AND TAIL AND (HEAD (S) CONJUGAT?)  
L8 113 TAIL AND (HEAD (S) CONJUGAT?)  
L9 24 (BILAYER OR MEMBRANE) AND TAIL AND (HEAD (S) CONJUGAT?)  
L10 11 DUP REM L9 (13 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 16:16:53 ON 22 JUL 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 16:24:09 ON 22  
JUL 2005

L11 89 L8 NOT L9  
L12 75 DUP REM L11 (14 DUPLICATES REMOVED)

=> (bilayer or membrane) and (head (s) conjugat?)  
L13 87 (BILAYER OR MEMBRANE) AND (HEAD (S) CONJUGAT?)

=> l13 not 19  
L14 63 L13 NOT L9

=> dup rem l14  
PROCESSING COMPLETED FOR L14  
L15 38 DUP REM L14 (25 DUPLICATES REMOVED)

=> t ti l15 1-38

L15 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Formulations, conjugates, and combinations of drugs for the treatment of neoplasms

L15 ANSWER 2 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New anti-tumor and cobalamin conjugate comprising cobalamin or its derivatives or analogue, linker and anti-tumor drug to treat tumor related disorder or disease e.g. Hodgkin's disease, neurofibromatosis and cervical dysplasia.

L15 ANSWER 3 OF 38 MEDLINE on STN DUPLICATE 1  
TI Preferred conformations of endogenous cannabinoid ligand anandamide.

L15 ANSWER 4 OF 38 MEDLINE on STN DUPLICATE 2  
TI In vivo and in vitro reconstitution of atg8 conjugation essential for autophagy.

L15 ANSWER 5 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
TI Macaque sperm release ESP13.2 and PSP94 during capacitation: The absence of ESP13.2 is linked to sperm-zona recognition and binding.

L15 ANSWER 6 OF 38 MEDLINE on STN DUPLICATE 3  
TI Distal cationic poly(ethylene glycol) lipid conjugates in large unilamellar vesicles prepared by extrusion enhance liposomal cellular uptake.

L15 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
TI Human monoclonal antibodies specific to prostate specific **membrane** antigen (PSMA) for cancer diagnosis and therapy

L15 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Humanized murine anti-epithelial glycoprotein 1 (EGP-1) antibodies RS7 and conjugates for diagnosis and treatment of cancer

L15 ANSWER 9 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Enhancement of transport of biological agent, e.g. antifungal agent, across **membrane**, comprising use of conjugate containing biological agent and oligomer with guanidino or amidino side chains.

L15 ANSWER 10 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New colloidal carrier composition useful for e.g. passive targeting of drugs to sites of pathology, comprises active agent and lipid-polymer conjugate comprising amphiphilic lipid and polymer e.g. poly-(amino acid

derivative).

- L15 ANSWER 11 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New lipid polymer conjugate useful for e.g. vesicular **bilayer** systems for use e.g. in therapy, comprises e.g. poly-amino acid derivative or poly-amino acid analogue polymer, and lipid attached to nitrogen or carbon terminal of polymer.
- L15 ANSWER 12 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New isolated or recombinant Bcl-B nucleic acids and polypeptides, for treating a disorder associated with apoptosis, such as cell degenerative or proliferative disorder e.g. cancer, Alzheimer's disease or Parkinson's disease.
- L15 ANSWER 13 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Biocompatible material useful for e.g. controlling cellular growth comprises at least two component surface.
- L15 ANSWER 14 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Composition comprising a combination of an oxidizing and/or reducing agent, a protein-denaturing agent, and a hapten, useful for treating neoplasms, tumors, and cancers.
- L15 ANSWER 15 OF 38 MEDLINE on STN  
TI Orienting otolith-ocular reflexes in the rabbit during static and dynamic tilts and off-vertical axis rotation.
- L15 ANSWER 16 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI New **membrane** permanent peptide complexes for medical imaging, diagnostics and therapy.
- L15 ANSWER 17 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Polymeric assay film for direct colorimetric detection of small molecules such as pathogens.
- L15 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Effect of PEG-lipid conjugates on the phase behavior of phosphatidylethanolamine dispersions
- L15 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Receptor membranes.
- L15 ANSWER 20 OF 38 MEDLINE on STN  
TI Otolith and semicircular canal contributions to the human binocular response to roll oscillation.
- L15 ANSWER 21 OF 38 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 5  
TI Determination of imazethapyr using capillary column flow injection liposome immunoanalysis.
- L15 ANSWER 22 OF 38 MEDLINE on STN  
TI Lectin binding characteristics of squamous cell carcinomas of the head and neck.
- L15 ANSWER 23 OF 38 MEDLINE on STN DUPLICATE 6  
TI Evidence for a direct action of GH on haemopoietic cells of a marine fish, the gilthead sea bream (*Sparus aurata*).
- L15 ANSWER 24 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Ink-jet recording **head** with uniform **conjugation** of the second.

- L15 ANSWER 25 OF 38 MEDLINE on STN DUPLICATE 7  
TI Lipid-amphotericin B complex structure in solution: a possible first step in the aggregation process in cell membranes.
- L15 ANSWER 26 OF 38 MEDLINE on STN  
TI [Clinical evaluation of otolithic function by the measurement of ocular cyclotorsion and skew deviation].  
Evaluation clinique de la fonction otolithique par mesure de la cyclotorsion oculaire et de la "skew deviation".
- L15 ANSWER 27 OF 38 MEDLINE on STN DUPLICATE 8  
TI Induction of vesicle-to-micelle transition by bile salts for DOPE vesicles incorporating immunoglobulin G.
- L15 ANSWER 28 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Receptor **membrane** for bio-sensors - comprising a closely packed array of self-assembling amphiphilic molecules having ion channels and/or receptor molecules.
- L15 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Differential localization of glycoconjugates having affinity for concanavalin A on the surface of the sperm head in the testis, the epididymis, and the ejaculate of the ram
- L15 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI pH-dependent stability and fusion of liposomes combining protonatable double-chain amphiphiles with phosphatidylethanolamine
- L15 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Identifying regions of **membrane** proteins in contact with phospholipid head groups: covalent attachment of a new class of aldehyde lipid labels to cytochrome c oxidase
- L15 ANSWER 32 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Localization of carbohydrate components in human synovial lining cells by binding with fluoresceinated lectins and their digestion with neuraminidase
- L15 ANSWER 33 OF 38 MEDLINE on STN DUPLICATE 9  
TI Immunocytochemical localization of acrosin in boar spermatozoa.
- L15 ANSWER 34 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI Immunocytochemical localization of acrosin in boar spermatozoa.
- L15 ANSWER 35 OF 38 MEDLINE on STN  
TI Branching pattern and properties of vertical- and horizontal-related excitatory vestibuloocular neurons in the cat.
- L15 ANSWER 36 OF 38 MEDLINE on STN DUPLICATE 10  
TI A novel approach for the topographical localization of glycolipids on the cell surface.
- L15 ANSWER 37 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 11  
TI Physiological studies on the sperm surface component responsible for sperm-egg bonding in sea urchin fertilization. II. Effect of concanavalin A on the fertilizing capacity of sperm
- L15 ANSWER 38 OF 38 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI Ultrasonic tomography in obstetrics and gynecology: Experimental results

and clinical methods.

=> d ibib abs 1,9-11,13-15,17-19,25,27-31,36 115

L15 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2005:216611 CAPLUS  
DOCUMENT NUMBER: 142:291340  
TITLE: Formulations, conjugates, and combinations of drugs  
for the treatment of neoplasms  
INVENTOR(S): Nichols, James M.; Foley, Michael A.; Keith, Curtis;  
Padval, Mahesh; Elliott, Peter  
PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA  
SOURCE: PCT Int. Appl., 92 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005020913	A2	20050310	WO 2004-US27695	20040825
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005080075	A1	20050414	US 2004-925835	20040825
PRIORITY APPLN. INFO.:			US 2003-497617P	P 20030825
OTHER SOURCE(S):	MARPAT	142:291340		
AB	The invention provides formulations and structural modifications for phenothiazine compds. which result in altered biodistribution, thereby reducing the occurrence of adverse reactions associated with this class of drug.			

L15 ANSWER 9 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-558976 [52] WPIDS  
DOC. NO. CPI: C2003-150616  
TITLE: Enhancement of transport of biological agent, e.g.  
antifungal agent, across **membrane**, comprising  
use of conjugate containing biological agent and oligomer  
with guanidino or amidino side chains.  
DERWENT CLASS: B05  
INVENTOR(S): JESSOP, T C; PATTABIRAMAN, K; PELKEY, E T; ROTHBARD, J B;  
WENDER, P A  
PATENT ASSIGNEE(S): (JESS-I) JESSOP T C; (PATT-I) PATTABIRAMAN K; (PELK-I)  
PELKEY E T; (ROTH-I) ROTHBARD J B; (WEND-I) WENDER P A;  
(CELL-N) CELLGATE INC; (STRD) UNIV LELAND STANFORD JUNIOR  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003049772	A2	20030619 (200352)*	EN	58	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU					

MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
 RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA  
 ZM ZW  
 US 2003185788 A1 20031002 (200365)  
 AU 2002359679 A1 20030623 (200420)  
 US 2004161405 A9 20040819 (200455)  
 EP 1461084 A2 20040929 (200463) EN  
 R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC  
 MK NL PT RO SE SI SK TR

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003049772	A2	WO 2002-US39698	20021211
US 2003185788	A1 Provisional	US 2001-339696P	20011211
		US 2002-318278	20021211
AU 2002359679	A1	AU 2002-359679	20021211
US 2004161405	A9 Provisional	US 2001-339696P	20011211
		US 2002-318278	20021211
EP 1461084	A2	EP 2002-794232	20021211
		WO 2002-US39698	20021211

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002359679	A1 Based on	WO 2003049772
EP 1461084	A2 Based on	WO 2003049772

PRIORITY APPLN. INFO: US 2001-339696P 20011211; US  
 2002-318278 20021211

AN 2003-558976 [52] WPIDS  
 AB: WO2003049772 A UPAB: 20030813

NOVELTY - The transport of a compound across a biological **membrane** is enhanced by contacting the **membrane** with a conjugate containing the biological agent covalently attached to a transport reagent containing a polymer with comprising 6 - 25 subunits with a guanidino or amidino side chain moiety in at least 50% of the subunits.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for guanidinium compounds of formula (I).

$m = 6 - 25$ ;

$T$  = first terminal functional group or  $L$  (both optionally protected);

$L$  = linking group having an attached therapeutic agent;

$W$  = second terminal functional group or  $L$  (both optionally protected);

$X_i$  = backbone subunit;

$i$  = numbering system of 1 - 25;

$Y_i$  = H, amino acid side chain, (hetero)aryl, 1-8C alkylene, 2-8C alkenylene, 2-8C alkynylene, 2-8C heteroalkylene, 3-8C cycloalkylalkylene, 2-8C spirocycloalkylene and/or (hetero)arylene;

$n = 0 - 2$ ;

$Z_i$  =  $-\text{NHC}(=\text{NH}_2)\text{NH}_2(+)$ , pyrrolidine-1-carboxamidin-yl, 2-amino-4,5-dihydro-3H-imidazol-1-ium-5-yl, imidazolidin-2-ylidene-ammonium-1-yl, 1,3-dihydro-benzoimidazol-2-ylidene-ammonium-1-yl, 1,3-dihydro-imidazol-2-ylidene-ammonium-1-yl, or 1,3-dihydro-benzoimidazol-2-ylidene-ammonium-yl; and provided that:

- (i) when n is 0, then Yi is H, amino acid side chain, or (hetero)aryl;
- (ii) when n is 1, then Yi is 1-8C alkylene, 2-8C alkenylene, 2-8C alkynylene, 2-8C heteroalkylene, 3-8C cycloalkylalkylene, 2-8C spirocycloalkylene and/or (hetero)arylene;
- (iii) T and W do not simultaneously contain an attached therapeutic agent; and
- (iv) (I) has at least 4 guanidinium moieties and the position of the compound joining W and T is not a polypeptide.

USE - For enhancing transport of biological agents such as diagnostic agent, anticancer agent, antifungal agent, antibacterial agent or anti-inflammation agent, across a biological **membrane** (claimed).

The method is also useful for screening the biological activity of agents which are unable or poorly able to enter cells by themselves.

ADVANTAGE - The method promotes transport of the conjugate across the **membrane** at a higher rate than the **trans-membrane** transport rate of the biological agent in the non-conjugated form. It provides an efficient way of identifying active agents that might not otherwise be accessible through large scale screening programs, for lack of an effective and convenient way of transporting the agent into the cell or organelle, and enables the testing of activities of agents that by themselves are unable or poorly able to enter cells to manifest biological activity. The delivery of small organic molecules having poor solubilities in aqueous liquids such as serum and aqueous saline can be administered in greater dosage and with more efficacy.

Dwg.0/23

L15 ANSWER 10 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2003-229291 [22] WPIDS  
 CROSS REFERENCE: 2003-247851 [24]  
 DOC. NO. CPI: C2003-058853  
 TITLE: New colloidal carrier composition useful for e.g. passive targeting of drugs to sites of pathology, comprises active agent and lipid-polymer conjugate comprising amphiphilic lipid and polymer e.g. poly-(amino acid derivative).  
 DERWENT CLASS: A23 A96 B07  
 INVENTOR(S): BRUIN, P; DE BOER, L W T; DE VRINGER, T; HENNINK, W E; METSELAAR, J M; OUSSOREN, C; STORM, G; DEBOER, L W T; HENNICK, W E; THEODORUS, D B L W  
 PATENT ASSIGNEE(S): (YAMA) YAMANOUCHI EURO BV; (BRUI-I) BRUIN P; (DVRI-I) DE VRINGER T; (HENN-I) HENNICK W E; (METS-I) METSELAAR J M; (OUSS-I) OUSSOREN C; (STOR-I) STORM G; (THEO-I) THEODORUS D B L W  
 COUNTRY COUNT: 91  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
<hr/>					
WO 2002098952	A1	20021212 (200322)*	EN	51	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AU BA BB BG BR BZ CA CN CO CR CU CZ DM DZ EC EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MA MG MK MN MX NO NZ OM PH PL RO SG SI SK TT UA US UZ VN YU ZA					
EP 1392755	A1	20040303 (200417)	EN		
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
NO 2003005264	A	20040128 (200419)			
SK 2003001597	A3	20040608 (200441)			
CZ 2003003480	A3	20040714 (200448)			
KR 2004027512	A	20040401 (200451)			

KR 2004027513	A	20040401 (200451)	
AU 2002319248	A1	20021216 (200452)	
JP 2004527586	W	20040909 (200459)	84
CN 1520435	A	20040811 (200476)	
US 2004241222	A1	20041202 (200480)	
ZA 2003008937	A	20050126 (200513)	57
BR 2002009699	A	20050201 (200515)	
IN 2003001882	P4	20041211 (200530)	EN
MX 2003011049	A1	20040701 (200545)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002098952	A1	WO 2002-EP6783	20020603
EP 1392755	A1	EP 2002-748799	20020603
		WO 2002-EP6783	20020603
NO 2003005264	A	WO 2002-EP6783	20020603
		NO 2003-5264	20031127
SK 2003001597	A3	WO 2002-EP6783	20020603
		SK 2003-1597	20020603
CZ 2003003480	A3	WO 2002-EP6783	20020603
		CZ 2003-3480	20020603
KR 2004027512	A	KR 2003-715720	20031201
KR 2004027513	A	KR 2003-715722	20031201
AU 2002319248	A1	AU 2002-319248	20020603
JP 2004527586	W	WO 2002-EP6783	20020603
		JP 2003-502070	20020603
CN 1520435	A	CN 2002-812735	20020603
US 2004241222	A1	WO 2002-EP6783	20020603
		US 2004-479031	20040617
ZA 2003008937	A	ZA 2003-8937	20031117
BR 2002009699	A	BR 2002-9699	20020603
		WO 2002-EP6783	20020603
IN 2003001882	P4	WO 2002-EP6783	20020603
		IN 2003-CN1882	20031201
MX 2003011049	A1	WO 2002-EP6783	20020603
		MX 2003-11049	20031201

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1392755	A1 Based on	WO 2002098952
SK 2003001597	A3 Based on	WO 2002098952
CZ 2003003480	A3 Based on	WO 2002098952
AU 2002319248	A1 Based on	WO 2002098952
JP 2004527586	W Based on	WO 2002098952
BR 2002009699	A Based on	WO 2002098952
MX 2003011049	A1 Based on	WO 2002098952

PRIORITY APPLN. INFO: EP 2001-202107 20010601

AN 2003-229291 [22] WPIDS

CR 2003-247851 [24]

AB WO 200298952 A UPAB: 20050715

NOVELTY - New colloidal carrier composition (I) comprises:

- (i) an active agent; and
- (ii) a lipid-polymer conjugate (Ia).

DETAILED DESCRIPTION - New colloidal carrier composition (I) comprises:

- (1) an active agent; and
- (2) a lipid-polymer **conjugate** (Ia) which is obtainable from

amphiphilic lipid that consists of at least one hydrophobic apolar moiety and hydrophilic polar **head** group, and polymer or its monomeric precursor, where the polymer is poly-(amino acid), poly-(amino acid derivative) or poly-(amino acid analog).

(Ia) provides long-circulating properties to (I).

ACTIVITY - Cytostatic; Antibacterial; Antiinflammatory.

USE - (I) is useful for providing a therapeutic agent, a biological agent, physiological agent, prophylactic or diagnostic agent (including imaging agents and radio-actively labeled compounds) in e.g. vesicular **bilayer** systems such as liposomes, niosomes and reversed vesicles, micellar systems, nanocapsules and nanospheres. (I) is also useful for passive targeting to sites of pathology (e.g. tumors, infection, inflammation) and for active targeting to cells in bloodstream, to endothelium. (I) is also useful as an artificial oxygen delivery system, blood-pool imaging and anti-fouling coating for biomaterials.

ADVANTAGE - The stability of liposomes prepared with (Ia) is improved as compared to that of conventional liposome preparations. (Ia) when incorporated into (I) provides long-circulating properties to these compositions. (Ia) is biodegradable and has reduced lipid-dose dependency as compared with polyethylene glycol-liposomes. An increased clearance after second injection of the composition is not always observed, and the reduction in blood circulation time is moderate. In an *in vivo* experimental arthritis model, one single intravenous injection of (I) appeared effective repeated injections of non-encapsulated corticosteroid compound or when encapsulated in conventional liposomes. Also, side effects associated with corticosteroid-based therapy will be reduced, due to reduction in the amount of corticosteroids that has to be administered.

DESCRIPTION OF DRAWING(S) - The figure shows a graphical representation of the mean values for the calculated percentage injected dose in blood samples versus time for polyethylene glycol-distearoyl phosphatidylethanolamine (PEG-DSPE)-containing liposomal preparations, having a different amount of lipid.

Dwg.1/6

L15 ANSWER 11 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2003-247851 [24] WPIDS  
CROSS REFERENCE: 2003-229291 [22]  
DOC. NO. CPI: C2003-063721  
TITLE: New lipid polymer conjugate useful for e.g. vesicular **bilayer** systems for use e.g. in therapy, comprises e.g. poly-amino acid derivative or poly-amino acid analogue polymer, and lipid attached to nitrogen or carbon terminal of polymer.  
DERWENT CLASS: A23 A96 B07  
INVENTOR(S): BRUIN, P; DE BOER, L W T; DE VRINGER, T; HENNINK, W E; METSELAAR, J M; OUSSOREN, C; STORM, G; DE BRINGER, T; METSELLAR, J M; DEBOER, L W T; HENNICK, W E; VRINGER, T D (YAMA) YAMANOUCHI EURO BV; (BRUI-I) BRUIN P; (DBOE-I) DE BOER L W T; (HENN-I) HENNICK W E; (METS-I) METSELAAR J M; (OUSS-I) OUSSOREN C; (STOR-I) STORM G; (VRIN-I) VRINGER T D  
PATENT ASSIGNEE(S):  
COUNTRY COUNT: 91  
PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2002098951	A2 20021212 (200324)*	EN	44	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW			
W:	AE AG AL AU BA BB BG BR BZ CA CN CO CR CU CZ DM DZ EC EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MA MG MK MN MX NO NZ OM PH PL RO SG SI SK TT UA US UZ VN YU ZA			

EP 1392756 A2 20040303 (200417) EN  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR  
 NO 2003005263 A 20040128 (200419)  
 SK 2003001598 A3 20040608 (200441)  
 CZ 2003003479 A3 20040714 (200448)  
 AU 2002320851 A1 20021216 (200452)  
 JP 2004527585 W 20040909 (200459) 78  
 US 2004254352 A1 20041216 (200482)  
 BR 2002009695 A 20050111 (200512)  
 ZA 2003008938 A 20050126 (200513) 56  
 IN 2003001888 P4 20041211 (200530) EN  
 MX 2003011050 A1 20040701 (200545)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002098951	A2	WO 2002-EP6432	20020603
EP 1392756	A2	EP 2002-754661	20020603
		WO 2002-EP6432	20020603
NO 2003005263	A	WO 2002-EP6432	20020603
		NO 2003-5263	20031127
SK 2003001598	A3	WO 2002-EP6432	20020603
		SK 2003-1598	20020603
CZ 2003003479	A3	WO 2002-EP6432	20020603
		CZ 2003-3479	20020603
AU 2002320851	A1	AU 2002-320851	20020603
JP 2004527585	W	WO 2002-EP6432	20020603
		JP 2003-502069	20020603
US 2004254352	A1	WO 2002-EP6432	20020603
		US 2004-479319	20040723
BR 2002009695	A	BR 2002-9695	20020603
		WO 2002-EP6432	20020603
ZA 2003008938	A	ZA 2003-8938	20031117
IN 2003001888	P4	WO 2002-EP6432	20020603
		IN 2003-CN1888	20031201
MX 2003011050	A1	WO 2002-EP6432	20020603
		MX 2003-11050	20031201

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1392756	A2 Based on	WO 2002098951
SK 2003001598	A3 Based on	WO 2002098951
CZ 2003003479	A3 Based on	WO 2002098951
AU 2002320851	A1 Based on	WO 2002098951
JP 2004527585	W Based on	WO 2002098951
BR 2002009695	A Based on	WO 2002098951
MX 2003011050	A1 Based on	WO 2002098951

PRIORITY APPLN. INFO: EP 2001-202107 20010601  
 AN 2003-247851 [24] WPIDS  
 CR 2003-229291 [22]  
 AB WO 200298951 A UPAB: 20050715  
 NOVELTY - New lipid polymer **conjugate** (A) comprises at least one hydrophobic apolar moiety and a hydrophilic polar **head** group, and a polymer of specific formula or monomeric precursor having nitrogen (N) and carbon (C) terminal end groups.  
 The polymer is a poly-(amino acid), poly-(amino acid derivative) or a poly-(amino acid) analog.

The lipid is attached to N or C terminal of the polymer.

DETAILED DESCRIPTION - A lipid polymer **conjugate** comprises at least one hydrophobic apolar moiety and a hydrophilic polar **head group**, and a polymer of formula -(NHCHR(CH<sub>2</sub>)<sub>m</sub>CO)n- (I) or monomeric precursor having nitrogen (N) and carbon (C) terminal end groups.

The polymer is a poly-(amino acid), poly-(amino acid derivative) or a poly-(amino acid) analog.

The lipid is attached to N or C terminal of the polymer.

The lipid polymer is obtainable from an amphiphilic lipid.

R = H, -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>OR, -(CH<sub>2</sub>)<sub>x</sub>OR<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>-CO-NHR<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>-NH-CO-R<sub>1</sub>, -(CH<sub>2</sub>)<sub>x</sub>-SO<sub>y</sub>CH<sub>3</sub>, OR-(CH<sub>2</sub>)<sub>x</sub>COOH;

R<sub>1</sub> = hydrogen or 1-4C alkyl optionally substituted with one or more hydroxy groups or one di 1-4C alkylamine group;

x = 0-4;

m = 1 or 0; and

y = 1 or 2.

USE - (A) are used for inclusion into a colloidal carrier composition e.g. vesicular **bilayer** systems, such as liposomes, niosomes and reversed vesicles, micellar systems, nanocapsules and nanospheres and for use in therapy, diagnosis and prophylaxis.

ADVANTAGE - The polymer lipid conjugates (A) exhibits ability to reduce zeta potential, thus demonstrates the polymer grafting shielded the surface charge. The polymer lipid conjugates are biodegradable and hence provide no risk of accumulation in cells of animal or human body. (A) exhibits reduced lipid dose dependency. An increased clearance after second injection of the lipid polymer conjugate composition is not observed and the reduction in blood circulation time is moderate.

DESCRIPTION OF DRAWING(S) - The figure shows a graph showing the mean values for the calculated percentage injected dose in blood samples versus time for polyethylene glycol-poly(2-hydroxyethyl)-L-asparagine containing liposomal preparation having different amount of total lipid.

Dwg.1/6

L15 ANSWER 13 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2002-434879 [46] WPIDS  
DOC. NO. NON-CPI: N2002-342354  
DOC. NO. CPI: C2002-123416  
TITLE: Biocompatible material useful for e.g. controlling cellular growth comprises at least two component surface.  
DERWENT CLASS: A18 A23 A25 A96 B04 B07 D16 D22 P34  
INVENTOR(S): ALTANKOV, G; JANKOVA, K; JONSSON, G; THOM, V; ULRICH, M  
PATENT ASSIGNEE(S): (SURF-N) SURFARC APS; (BIOS-N) BIOSURF APS; (ALTA-I) ALTANKOV G; (JANK-I) JANKOVA K; (JONS-I) JONSSON G; (THOM-I) THOM V; (ULBR-I) ULRICH M  
COUNTRY COUNT: 98  
PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
WO 2002015955	A2 20020228 (200246)*	EN 217		
	RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW			
AU 2001081758	A 20020304 (200247)			
EP 1326655	A2 20030716 (200347)	EN		
	R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR			
US 2005053642	A1 20050310 (200519)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002015955	A2	WO 2001-DK557	20010823
AU 2001081758	A	AU 2001-81758	20010823
EP 1326655	A2	EP 2001-960202	20010823
		WO 2001-DK557	20010823
US 2005053642	A1	WO 2001-DK557	20010823
		US 2003-362677	20030815

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001081758	A Based on	WO 2002015955
EP 1326655	A2 Based on	WO 2002015955

PRIORITY APPLN. INFO: DK 2000-1250 20000823  
 AN 2002-434879 [46] WPIDS  
 AB WO 200215955 A UPAB: 20040408  
 NOVELTY - Biocompatible material comprises a surface comprising at least two components such as a hydrophobic substratum and a macromolecule of hydrophobic nature.

DETAILED DESCRIPTION - Biocompatible material comprises a substratum (A) contacted by at least one macro-molecule. The material has a first advancing contact angle (a). (A) has a second advancing contacting angle b0 when not contacted by a macromolecule and another second advancing contact angle bsat, when the substratum is saturated by the macromolecules. The advancing contact angles are measured using water and air saturated by water vapor. The bsat does not change when the substratum is contacted by further macromolecules by a chemical bond. The relation between the advancing contact angles is  $R = (b0 - a)/(b0 - bsat)$  where R is 0 - less than 0.4.

INDEPENDENT CLAIMS are included for the following:  
 (1) use of the material in the manufacture of an implantable organ or its part; and  
 (2) producing the material by:  
 (i) contacting the substratum having a second contact angle with a composition comprising several macromolecules; and  
 (ii) providing a biocompatible material comprising a substratum contacted by several macromolecules.

ACTIVITY - Antiinfertility.

MECHANISM OF ACTION - None given.

USE - For controlling cellular growth, cellular proliferation, and/or cellular differentiation; separating and/or isolating biological material; producing a biohybrid organ; diagnosis or carrying out therapy, carrying out surgery of human or animal or their parts; as a carrier for in vivo delivery of a medicament to a human or animal body (claimed); as cell culture dishes, bioreactors, implants, biohybrid organs e.g. pacemaker etc.; to create bio-compatible surfaces suitable for use in emerging technologies e.g. the construction and application of the surface architectures of biomaterials with innovative functionalities such as bioartificial pancreas, liver or kidney; to improve the implantation rates after in vitro fertilization; to treat and/or prevent infertility or early pregnancy loss; to provide a container capable of mimicking an endomaterial environment of a female uterus; to enhance fertility potential of animal oocytes e.g. sports, zoo, pet and farm animals; in a dialysis **membrane**; for making tissue engineered constructs, valves and vessels; to provide polymer-based drug release systems e.g. systems based on implantable materials; for bone reconstruction with

tissue engineering vascularized bone; for engineering composite bone and cartilage; to increase the mechanical strength and liability of e.g. heart valve leaflets and other engineered tissues; for growing vertebrate cells e.g. human cells including human skin cells; in skin grafting.

ADVANTAGE - (A) in cooperation with the macromolecule maintains, improves and/or stabilizes the biologically active form or its conformation. The biologically active compound improves contact between the material and a biological entity e.g. biological cell or virus or their parts, including a polypeptide or its part, nucleic acid, carbohydrate and/or lipid. The material does not induce an acute or chronic inflammatory response and does not prevent a proper differentiation of implant surrounding tissue. The method is simple and inexpensive. The surfaces can be used as cell culture dishes, bioreactors, implants etc. without the need of extensive development of new polymers and biocompatibility screening, ensures spatial separation of e.g. xenogenic and/or allogenic cells from the host immune system. The method increases the rate of maturation of immature oocytes and potential of fertilization of oocytes, minimizes incubation-time, and improves the quality of incubated oocytes. The degree of modification resulting from macromolecule including PEG attachment does not reduce the permeability of the membranes, thus suitable for the application as haemodialysis **membrane**. The tissue engineered constructs have improved mechanical strength and flexibility while retains biocompatible properties of the material. The valves and vessels withstand repeated stress and stirring.

Dwg.0/31

L15 ANSWER 14 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-514501 [56] WPIDS  
DOC. NO. CPI: C2001-153732  
TITLE: Composition comprising a combination of an oxidizing and/or reducing agent, a protein-denaturing agent, and a haptene, useful for treating neoplasms, tumors, and cancers.  
DERWENT CLASS: B05 D16  
INVENTOR(S): YU, B  
PATENT ASSIGNEE(S): (YUBB-I) YU B  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001052868	A1	20010726 (200156)*	EN	83	
RW:	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ				
NL	OA PT SD SE SL SZ TR TZ UG ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM				
DZ	EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC				
LK	LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE				
SG	SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW				
AU 2001030977	A	20010731 (200171)			
US 2002044919	A1	20020418 (200228)			
CN 1431909	A	20030723 (200365)			
JP 2004505009	W	20040219 (200414)	223		
US 6811788	B2	20041102 (200472)			
US 2005118187	A1	20050602 (200537)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001052868	A1	WO 2001-US1737	20010118
AU 2001030977	A	AU 2001-30977	20010118

US 2002044919	A1 Provisional	US 2000-177024P	20000119
		US 2001-765060	20010117
CN 1431909	A	CN 2001-806830	20010118
JP 2004505009	W	JP 2001-552915	20010118
		WO 2001-US1737	20010118
US 6811788	B2 Provisional	US 2000-177024P	20000119
		US 2001-765060	20010117
US 2005118187	A1 Provisional CIP of	US 2000-177024P US 2001-765060 US 2004-973798	20000119 20010117 20041025

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030977	A Based on	WO 2001052868
JP 2004505009	W Based on	WO 2001052868
US 2005118187	A1 CIP of	US 6811788

PRIORITY APPLN. INFO: US 2000-177024P 20000119; US  
2001-765060 20010117; US  
2004-973798 20041025

AN 2001-514501 [56] WPIDS

AB WO 2001052868 A UPAB: 20011001

NOVELTY - A composition (I) comprising a combination of an oxidizing or reducing agent, a protein-denaturing agent, and a hapten, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a kit comprising the combination (I);
- (2) an article of manufacture comprising:
  - (a) packaging material;
  - (b) the combination above; and
  - (c) a label indicating that the article is for treating neoplasms; and
- (3) a method for treating neoplasm in a mammal comprising in situ administration to the neoplasm of a mammal, a hapten and a coagulation agent or treatment that causes coagulation of the neoplasm (an autologous immune response is generated against the neoplasm).

ACTIVITY - Cytostatic.

31 advanced stage IV liver cancer patients were treated using the new combination. Prior to procedure, patients were given a mild sedative or painkiller. Patients were calmed thoroughly and were also monitored by modern medial imaging. With local anesthesia, percutaneous puncture was administered directly into the tumor using a spinal needle connected to a high-power syringe containing a combination of ethanol, H2O2, anticancer drug AraC (8 mg/ml) and hemotoxinil (5 mg/ml). Combination was injected directly into the tumor and distributed throughout the matrix of the whole tumor. Sonic imaging showed the stranger echo imaging which indicated the coagulation area.

Following coagulation lysis and tumor cell death monitored by sonic imaging, which showed liquefied echo, tumor started to shrink and disappear. Normal tissues grew replacing the tumor. The process was monitored by medical imaging systems. The amount of the ingredients of the combination injected into the tumor was determined by the diameter of tumors (cm) with 2 ml of the combination for each centimeter.

Procedure was repeated in 1-2 weeks. On average, each patient was treated with the injection for 3 times. No severe side effects for all the treated patients was observed, although some patients experienced tolerable pain the injection site while a few had light fever during the first week. All side effects disappeared in about 1 week. No serious complications happened in any cases.

MECHANISM OF ACTION - Gene therapy.

USE - The combination and the methods are useful for treating neoplasms, tumors, and cancers, including neoplasm or cancer of the e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, endometrium, esophagus, eye, eyelids, fallopian tube, gastrointestinal tract, head and neck, heart, kidney, larynx, liver, lung, or mandible.

The combination and methods may further be used in treating tumors of mesenchymal origin (e.g. connective tissue and derivatives, or endothelial and related tissues blood vessels), epithelial origin (stratified squamous carcinoma, or basal cells of skin or adenexa), and tumors derived from more than one neoplastic cell types derived from more than one germ layers.

The treatment may be used with radiation therapy, before surgery for the pre-treatment of neoplasm for easier removal of the neoplastic mass and reduces the neoplasm metastasis rate, or with gene therapy.

Dwg.0/4

L15 ANSWER 15 OF 38 MEDLINE on STN  
ACCESSION NUMBER: 2001673979 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11718771  
TITLE: Orienting otolith-ocular reflexes in the rabbit during static and dynamic tilts and off-vertical axis rotation.  
AUTHOR: Maruta J; Simpson J I; Raphan T; Cohen B  
CORPORATE SOURCE: Departments of Neurology and Physiology and Biophysics, Mount Sinai School of Medicine, 1 East 100th Street, Box 1135, New York, NY 10029, USA.  
SOURCE: Vision research, (2001) 41 (25-26) 3255-70.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals; Space Life Sciences  
ENTRY MONTH: 200203  
ENTRY DATE: Entered STN: 20011126  
Last Updated on STN: 20020413  
Entered Medline: 20020311  
AB Orienting otolith-ocular reflexes were assessed in rabbits using static tilt, off-vertical axis rotation (OVAR) and sinusoidal oscillation about earth-horizontal axes. In all paradigms, **head** pitch produced ocular counter-pitch and vergence, and **head** roll produced ocular counter-roll and **conjugate** yaw version. Thus, vergence and version are essential components of orienting reflexes along the naso-occipital and bitemporal axes. Vergence and version caused misalignment between the axes of eye and head movement during pitch and roll head movements. Semicircular canal input broadened the band-pass of these orienting reflexes, which would make them more appropriate when compensating for head movement during active motion.

L15 ANSWER 17 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2000-071650 [06] WPIDS  
CROSS REFERENCE: 1996-393530 [39]; 1997-393702 [36]; 1998-145264 [13];  
1998-457256 [39]; 1998-495982 [42]; 1999-204741 [17];  
2000-147218 [13]; 2001-225814 [23]; 2002-089133 [12];  
2002-105080 [14]  
DOC. NO. CPI: C2000-020448  
TITLE: Polymeric assay film for direct colorimetric detection of small molecules such as pathogens.  
DERWENT CLASS: A89 B04 D16 J04  
INVENTOR(S): CHARYCH, D; NAGY, J; SPEVAK, W  
PATENT ASSIGNEE(S): (REGC) UNIV CALIFORNIA  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
US 6001556	A 19991214 (200006)*			20

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6001556	A CIP of	US 1992-976697	19921113
	CIP of	US 1992-982189	19921125
	Cont of	US 1993-159927	19931130
		US 1996-592724	19960126

PRIORITY APPLN. INFO: US 1993-159927 19931130; US  
 1992-976697 19921113; US  
 1992-982189 19921125; US  
 1996-592724 19960126

AN 2000-071650 [06] WPIDS

CR 1996-393530 [39]; 1997-393702 [36]; 1998-145264 [13]; 1998-457256 [39];  
 1998-495982 [42]; 1999-204741 [17]; 2000-147218 [13]; 2001-225814 [23];  
 2002-089133 [12]; 2002-105080 [14]

AB US 6001556 A UPAB: 20040928

NOVELTY - Polymeric assay films for direct colorimetric detection tests of small molecules, are new.

DETAILED DESCRIPTION - A polymerized **bilayer** film (I) comprises:

(1) a conjugated polymer backbone (comprising a number of polymerized diacetylene monomers);

(2) linker groups (which are covalently conjugated to the polymer backbone);

(3) ligands (either sialic acid and/or carbohydrates with ordering heads groups covalently conjugated to the linker groups) with direct affinity for an analyte; and

(4) a support structure.

The ordering **head** groups are bound to the surface of the **conjugated** polymer backbone in positions not occupied by the linker groups. The polymerized **bilayer** film undergoes a detectable color change upon binding of the analyte to the ligands.

INDEPENDENT CLAIMS are also included for the following:

(1) a method (II) of producing (I), comprising:

(a) providing:

(i) ligands (carbohydrates) with a direct affinity for an analyte;

(ii) linker groups with 2 terminal ends;

(iii) lipid monomers;

(iv) lipid monomers comprising ordering head groups; and

(v) a support surface;

(b) attaching the ligands to the lipid monomers so that the ligands are attached to one end of the linkers and the lipid monomers are attached to the other (to produce monomer-linear structural unit-ligand groups);

(c) mixing the monomer-linear structural unit-ligand groups with lipid monomers comprising ordering heads;

(d) spreading the mixture from step (c) on the support to form a **bilayer** film; and

(e) polymerizing the **bilayer** film (to form the polymerized **bilayer** film (I)); and

(2) a method for detecting an analyte, comprising contacting (I) with a sample thought to contain the analyte and detecting a color change in (I) (a color change is indicative of the presence of the analyte).

USE - (I) may be used for the direct detection of small molecules such as pathogens (e.g. influenza viruses, herpes virus, human

immunodeficiency virus (HIV), coronavirus, encephalomyelitis, chlamydia, rotavirus, polyomavirus, Streptococcus, Salmonella, sendai virus, mumps virus, Newcastle Disease virus, myxovirus, Escherichia coli, encephalomyocarditis virus and Plasmodium (claimed)). Other substances such as industrial materials, enzymes, hormones, cell wall fragments, blood components, disease indicators, cell components, antibodies, lectins and genetic material may also be detected using (I).

(I) also has application in feedstock and effluent monitoring, drug development and other types of medical testing.

**ADVANTAGE** - The use of (I) is easily automated, especially if a spectrometer is used to detect color changes. A multiple well system may be produced from (I) which allows inexpensive screening and sequential testing for analytes. (I) represents a new approach to the direct detection of a material using color changes in a monomolecular film which occurs when specifically bound to the target molecule. (I) is simple and inexpensive to produce.

(I) provides the advantages of both an immunoassay and chemical analysis in a single system. It has the inherent direct assay advantages of analytical chemistry methods and has a substantial environmental range of testing beyond that of immunoassays. This allows accommodation of various analytes in their most advantageous environmental parameters. Additionally, (I) allows rigorous direct analysis to occur even in very narrow environmental ranges, previously unavailable with analytical chemical techniques. The speed and simplicity of the color change indicator of (I) are its hallmark advantages.

Dwg.0/6

L15 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:243267 CAPLUS

DOCUMENT NUMBER: 131:15441

TITLE: Effect of PEG-lipid conjugates on the phase behavior of phosphatidylethanolamine dispersions

AUTHOR(S): Koynova, R.; Tenchov, B.; Rapp, G.

CORPORATE SOURCE: Institute of Biophysics, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.

SOURCE: Colloids and Surfaces, A: Physicochemical and Engineering Aspects (1999), 149(1-3), 571-575

CODEN: CPEAEH; ISSN: 0927-7757

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

**AB** The phase behavior of binary mixts. of hydrated dielaidoylphosphatidylethanolamine (DEPE) with two different PEG-lipid conjugates at a molar fraction below 0.2 has been studied by using time-resolved X-ray diffraction, and partial phase diagrams have been constructed. The studied **conjugates** comprise two saturated hydrocarbon acyl chains 14 carbon atoms long and PEG550 or PEG5000 chains covalently attached to a phosphoethanolamine polar **head** group, DMPE(PEG550) and DMPE(PEG5000), resp. When added in small amts. (10-20 mol%) to DEPE aqueous dispersions, both PEG-lipids favor the lamellar liquid crystalline (L $\alpha$ ) phase at the expense of the lamellar gel (L $\beta$ ) and the inverted hexagonal (HII) phases. One of the conjugates, DMPE(PEG550), shifts the L $\alpha$ -HII transition of DEPE to higher temps. by 2.5°C per mol% PEG-lipid, and induces the spontaneous formation of a cubic phase of space group Im3m in the DEPE dispersions. The cubic phase intrudes between the lamellar liquid crystalline and the inverted hexagonal

phases in the DEPE/DMPE(PEG550) phase diagram. Low amts. of the DMPE(PEG5000) conjugate only shift the L $\alpha$ -HII transition of DEPE to higher temps., at 5.2°C per mol% PEG-lipid, but does not promote the formation of addnl. phases. The resp. slopes for the L $\beta$ -L $\alpha$ , transition temperature depression are 10-15 times smaller. At

> 15 mol% DMPE(PEG550) and at > 5 mol% DMPE(PEG5000), the non-lamellar phases are eliminated from the phase diagrams. Structural data on the organization of the pure hydrated PEG-lipid conjugates are also provided, suggesting that these lipids form micelles and lamellae.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1998:471436 CAPLUS  
DOCUMENT NUMBER: 129:78811  
TITLE: Receptor membranes.  
INVENTOR(S): Cornell, Bruce Andrew; Braach-maksvytis, Vijolrta  
Lucija Brinislava  
PATENT ASSIGNEE(S): Australian Membrane and Biotechnology Research  
Institute, Australia  
SOURCE: U.S., 14 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5766960	A	19980616	US 1995-449895	19950523
US 5436170	A	19950725	US 1990-473932	19900125
US 5693477	A	19971202	US 1995-447569	19950523
US 5741712	A	19980421	US 1995-448178	19950523
PRIORITY APPLN. INFO.:				
			AU 1987-3346	A 19870727
			AU 1987-3348	A 19870727
			AU 1987-3453	A 19870731
			AU 1987-4478	A 19870921
			US 1990-473932	A 19900125
			WO 1988-AU273	W 19880727

AB A **membrane** comprising a closely packed array of self-assembling amphiphilic mols., and is characterized in that it incorporates a plurality of ion channels, and/or at least a proportion of the self-assembling mols. comprise a receptor mol. conjugated with a supporting entity. The ion channel is selected from the group consisting of peptides capable of forming helixes and aggregates thereof, coronands, cryptands, podands and combinations thereof. In the amphiphilic mols. comprising a receptor mol. **conjugated** with a supporting entity, the receptor mol. has a receptor site and is selected from the group consisting of Igs, antibodies, antibody fragments, dyes, enzymes and lectins. "The supporting entity is selected from the group consisting of a lipid **head** group, a hydrocarbon chain(s), a cross-linkable mol. and a **membrane** protein. The supporting entity is attached to the receptor mol. at an end remote from the receptor site. In preferred embodiments the ion channel is gramicidin A, and is preferable gated. Such membranes may be used in the formation of sensing devices.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 25 OF 38 MEDLINE on STN DUPLICATE 7  
ACCESSION NUMBER: 93229518 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8471621  
TITLE: Lipid-amphotericin B complex structure in solution: a possible first step in the aggregation process in cell membranes.  
AUTHOR: Balakrishnan A R; Easwaran K R  
CORPORATE SOURCE: Molecular Biophysics Unit, Indian Institute of Science, Bangalore.

SOURCE: Biochemistry, (1993 Apr 20) 32 (15) 4139-44.  
Journal code: 0370623. ISSN: 0006-2960.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199305  
ENTRY DATE: Entered STN: 19930604  
Last Updated on STN: 19930604  
Entered Medline: 19930517

AB The interactions between the polyene antibiotic amphotericin B with dipalmitoylphosphatidylcholine were investigated in vesicles (using circular dichroism) and in chloroform solution (using circular dichroism and <sup>1</sup>H, <sup>13</sup>C, and <sup>31</sup>P nuclear magnetic resonance). The results show that amphotericin B readily aggregates in vesicles and that the extent of aggregation depends on the lipid:drug concentration ratio. Introduction of sterol molecules into the **membrane** hastens the process of aggregation of amphotericin B. In chloroform solutions amphotericin B strongly interacts with phospholipid molecules to form a stoichiometric complex. The results suggest that there are interactions between the **conjugated** heptene stretch of amphotericin B and the methylene groups of lipid acyl chains, while the sugar moiety interacts with the phosphate **head** group by the formation of a hydrogen bond. A model is proposed for the lipid-amphotericin B complex, in which amphotericin B interacts equally well with the two lipid acyl chains, forming a 1:1 complex.

L15 ANSWER 27 OF 38 MEDLINE on STN DUPLICATE 8  
ACCESSION NUMBER: 93123198 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 1478927  
TITLE: Induction of vesicle-to-micelle transition by bile salts for DOPE vesicles incorporating immunoglobulin G.  
AUTHOR: Lee E O; Kim J G; Kim J D  
CORPORATE SOURCE: Department of Chemical Engineering and Bioprocess ERC, Korea Advanced Institute of Science and Technology, Taejon.  
SOURCE: Journal of biochemistry, (1992 Nov) 112 (5) 671-6.  
Journal code: 0376600. ISSN: 0021-924X.  
PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199302  
ENTRY DATE: Entered STN: 19930226  
Last Updated on STN: 19930226  
Entered Medline: 19930208

AB The vesicle-to-micelle transition of immunoliposomes formed by dioleoylphosphatidyl-ethanolamine (DOPE) and palmitoyl-immunoglobulin G (p-IgG) was investigated in the presence of bile salts and conjugated bile salts. Turbidity and the release of calcein from liposomes were measured as a function of the amount of bile salts added and compared with the solubilizing profiles of the salts according to the number and configurational state of hydroxy groups in the cholate. The solubilizing phenomena by bile salts conjugated with glycine or taurine were investigated in comparison with non-conjugated bile salts. The solubilizing effect of bile salts on the **bilayer** of immunoliposomes increased remarkably with the number of hydroxy groups, but was not influenced by the configurational state of the hydroxy group. The half-maximal concentration of bile salts, defined as the concentration giving the half-maximum turbidity of liposome solutions, decreased with hydrophobicity in the phosphatidylcholine (PC) **bilayer**. The increase in the hydrophobicity of bile salts induces the ability to permeabilize and solubilize phospholipid vesicles. In the case of PC or

PE liposome bilayers with inserted protein, bile salts conjugated with taurine or glycine had lower hydrophobicity than non-conjugated bile salts and showed a lower half-maximal concentration. The **conjugated** bile salts are believed to interact with lipids and solubilize the bilayers, while the **head** groups of bile salts interact with the inserted protein and extract it from the lipid **bilayer**.

L15 ANSWER 28 OF 38 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 1989-061259 [08] WPIDS  
 DOC. NO. NON-CPI: N1989-046623  
 DOC. NO. CPI: C1989-027144  
 TITLE: Receptor membrane for bio-sensors - comprising  
 a closely packed array of self-assembling amphiphilic  
 molecules having ion channels and/or receptor molecules.  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): BRAACH-MAKSVYTIS, V L B; CORNELL, B A; BRAACH-MAKSVYTIS,  
 V L; BRAACHMAKS, V L B; BRAACH-MAKSVYTIS, V  
 PATENT ASSIGNEE(S): (CSIR) COMMONWEALTH SCI & IND RES ORG; (AUME-N) AUSTRALIA  
 MEMBRANE & BIOTECHNOLOGY RES INST; (AUME-N) AUSTRALIAN  
 MEMBRANE & BIOTECHNOLOGY INST  
 COUNTRY COUNT: 15  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 8901159	A	19890209 (198908)*	EN	40	
RW: AT BE CH DE FR GB IT LI LU NL SE					
W: AU JP US					
AU 8821279	A	19890301 (198923)			
EP 382736	A	19900822 (199034)			
R: AT BE CH DE FR GB IT LI LU NL SE					
JP 03503209	W	19910718 (199135)			
EP 382736	B1	19941102 (199442)	EN	24	
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 3852036	G	19941208 (199503)			
EP 382736	A4	19901205 (199514)			
CA 1335879	C	19950613 (199531)			
US 5436170	A	19950725 (199535)		15	
JP 2682859	B2	19971126 (199801)		14	
US 5693477	A	19971202 (199803)		13	
US 5741712	A	19980421 (199823)		13	
US 5766960	A	19980616 (199831)			

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8901159	A	WO 1988-AU273	19880727
EP 382736	A	EP 1988-907164	19880727
JP 03503209	W	JP 1988-506329	19880727
EP 382736	B1	EP 1988-907164	19880727
DE 3852036	G	WO 1988-AU273	19880727
		DE 1988-3852036	19880727
		EP 1988-907164	19880727
		WO 1988-AU273	19880727
EP 382736	A4	EP 1988-907164	
CA 1335879	C	CA 1988-573217	19880727
US 5436170	A	WO 1988-AU273	19880727
		US 1990-473932	19900125
JP 2682859	B2	JP 1988-506329	19880727
		WO 1988-AU273	19880727
US 5693477	A Cont of	US 1990-473932	19900125

US 5741712	A Div ex	US 1995-447569 US 1990-473932 US 1995-448178 US 1990-473932 US 1995-449895	19950523 19900125 19950523 19900125 19950523
US 5766960	A CIP of		

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 382736	B1 Based on	WO 8901159
DE 3852036	G Based on	EP 382736
	Based on	WO 8901159
US 5436170	A Based on	WO 8901159
JP 2682859	B2 Previous Publ.	JP 03503209
	Based on	WO 8901159
US 5693477	A Cont of	US 5436170
US 5741712	A Div ex	US 5436170
US 5766960	A CIP of	US 5436170

PRIORITY APPLN. INFO: AU 1987-4478 19870921; AU  
 1987-3346 19870727; AU  
 1987-3348 19870727; AU  
 1988-21279 19870728; AU  
 1987-3453 19870731

AN 1989-061259 [08] WPIDS

AB WO 8901159 A UPAB: 19960520

A **membrane** comprising a closely packed array of self-assembling amphiphilic molecules is claimed characterised in that (1) the **membrane** includes ion channels selected from peptides capable of forming helices and aggregates, podands, coronands, cryptands and combinations and/or (2) at least a proportion of the self-assembling amphiphilic molecules comprise a receptor molecule **conjugated** with a supporting entity, the receptor molecule having a receptor site and being selected from immunoglobulins, antibodies, antibody fragments, dyes, enzymes and lectins, the supporting entity being selected from a lipid head gp., a hydrocarbon chain, a cross-linkable molecule and a **membrane** protein, the supporting entity being **conjugated** with the receptor molecule at an end remote from the receptor site.

Pref. the ion channels are gramicidin or analogues. Also claimed is a biosensor comprising a **membrane bilayer** attached to a solid surface, the **bilayer** having an upper and lower layer, the lower layer being adjacent the solid surface and being provided with gps. reactive with the solid surface or with gps. provided on this, each layer of the **bilayer** being composed of self-assembling amphiphilic molecules and gramicidin monomers, and where a receptor moiety is attached to the gramicidin monomers in the upper layer. The solid surface is pref. a palladium-coated glass electrode.

USE/ADVANTAGE - The membranes are used partic. for the production of biosensors. They have a high density of receptor sites and serve as highly selective binding surfaces to which molecular species to be detected will bind.

0/6

Dwg. 0/6

ABEQ EP 382736 B UPAB: 19941212

A **membrane** bound to a solid non-porous surface, the **membrane** comprising a closely packed array of self-assembling amphiphilic molecules and characterised in that:

(1) the **membrane** includes a plurality of ion channels which are peptides capable of forming helices and aggregates thereof, a podand, coronand, cryptand or a combination thereof; and

(2) at least a proportion of the self-assembling amphiphilic

molecules comprise a receptor molecule conjugated with a supporting entity, the receptor molecule having a receptor site and being an immunoglobulin, antibody, antibody fragment, dye, enzyme or lectin;

the supporting entity being a lipid **head** group, a hydrocarbon chain(s), a cross-linkable molecule or a **membrane** protein and being **conjugated** with the receptor molecule at an end remote from the receptor site.

Dwg.0/6

ABEQ US 5436170 A UPAB: 19950905

**Membrane** comprises a closely packed array of self-assembling amphiphilic molecules, e.g. peptides that form helices and/or aggregates, such that numerous ion channels are present in the structure and at least part of the structure comprises a receptor (e.g. immunoglobulin, antibody or its active binding fragment, enzyme or lectin) conjugated with a hydrocarbon chain or **membrane** protein at a location remote from the receptor's active site.

USE - The prods. are components of selective biosensors.

ADVANTAGE - The **membrane** is mounted on a solid supporting surface to provide robustness and avoid fragility.

Dwg.0/6

ABEQ US 5693477 A UPAB: 19980119

A **membrane** comprising a closely packed array of self-assembling amphiphilic molecules is claimed characterised in that (1) the **membrane** includes ion channels selected from peptides capable of forming helices and aggregates, podands, coronands, cryptands and combinations and/or (2) at least a proportion of the self-assembling amphiphilic molecules comprise a receptor molecule **conjugated** with a supporting entity, the receptor molecule having a receptor site and being selected from immunoglobulins, antibodies, antibody fragments, dyes, enzymes and lectins, the supporting entity being selected from a lipid **head** gp., a hydrocarbon chain, a cross-linkable molecule and a **membrane** protein, the supporting entity being **conjugated** with the receptor molecule at an end remote from the receptor site.

Pref. the ion channels are gramicidin or analogues. Also claimed is a biosensor comprising a **membrane bilayer** attached to a solid surface, the **bilayer** having an upper and lower layer, the lower layer being adjacent the solid surface and being provided with gps. reactive with the solid surface or with gps. provided on this, each layer of the **bilayer** being composed of self-assembling amphiphilic molecules and gramicidin monomers, and where a receptor moiety is attached to the gramicidin monomers in the upper layer. The solid surface is pref. a palladium-coated glass electrode.

USE/ADVANTAGE - The membranes are used partic. for the prodn. of biosensors. They have a high density of receptor sites and serve as highly selective binding surfaces to which molecular species to be detected will bind.

Dwg.3/6

L15 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:109884 CAPLUS

DOCUMENT NUMBER: 108:109884

TITLE: Differential localization of glycoconjugates having affinity for concanavalin A on the surface of the sperm head in the testis, the epididymis, and the ejaculate of the ram

AUTHOR(S): Delpech, S.; Hamamah, S.; Pisseelet, C.; Courot, M.

CORPORATE SOURCE: INRA, Nouzilly, 37380, Fr.

SOURCE: Journal of Experimental Zoology (1988), 245(1), 59-62

CODEN: JEZOAO; ISSN: 0022-104X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The location of Con A receptors on the surface of the head of ram

spermatozoa originating from the rete testis, from 3 regions of the epididymis, or from the ejaculate was investigated by using a Au-Con A labeling technique. Electron microscopic observation revealed 3 major localizations, each being characteristic of the origin of the spermatozoa: periacrosomal in the rete testis, postacrosomal in the epididymis, on the entire surface of the sperm head in the ejaculate.

L15 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1987:419734 CAPLUS  
DOCUMENT NUMBER: 107:19734  
TITLE: pH-dependent stability and fusion of liposomes combining protonatable double-chain amphiphiles with phosphatidylethanolamine  
AUTHOR(S): Leventis, Rania; Diacovo, Thomas; Silvius, John R.  
CORPORATE SOURCE: Dep. Biochem., McGill Univ., Montreal, QC, H3G 1Y6, Can.  
SOURCE: Biochemistry (1987), 26(12), 3267-76  
CODEN: BICHAW; ISSN: 0006-2960  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A series of novel double-chain amphiphiles with protonatable **head** groups were prepared including acylated derivs. of various 2-substituted palmitic acids, amino acid **conjugates** of these species, and 1,2-dioleoyl-3-succinylglycerol. These species can be combined with phosphatidylethanolamine (PE) to prepare reverse-phase evaporation vesicles that are stable and trap hydrophilic solutes at pH 7. At weakly acidic pH values ( $\leq$ 6.5, depending on the titratable amphiphilic component), these pH-sensitive vesicles exhibit fusion, with a limited extent of contents mixing and extensive mixing of lipids, accompanied by leakage of aqueous contents. Protons and divalent cations show strong synergistic effects in promoting mixing of both lipids and aqueous contents between pH-sensitive vesicles prepared with any of a variety of double-chain titratable amphiphiles. Calorimetric results indicate that the relative stabilities of different types of pH-sensitive liposomes at low pH cannot be simply correlated with the propensity of the lipids to form a hexagonal II phase under these conditions. Fluorescence measurements demonstrate that single-chain fatty acids, but not double-chain titratable amphiphiles such as N-acyl-2-aminopalmitic acids, are rapidly removed from pH-sensitive vesicles in the presence of other lipid vesicles, serum albumin, or serum. Addnl., pH-sensitive liposomes containing double-chain titratable amphiphiles retain their aqueous contents better than do those containing single-chain amphiphiles in the presence of lipid membranes or albumin. Surprisingly, however, pH-sensitive vesicles of either type show retention of contents in the presence of serum that is comparable to that observed with vesicles composed purely of phospholipids. A model is proposed to explain these latter findings.

L15 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1986:84801 CAPLUS  
DOCUMENT NUMBER: 104:84801  
TITLE: Identifying regions of **membrane** proteins in contact with phospholipid head groups: covalent attachment of a new class of aldehyde lipid labels to cytochrome c oxidase  
AUTHOR(S): McMillen, Debra A.; Volwerk, Johannes J.; Ohishi, Junichi; Erion, Mark; Keana, John F. W.; Jost, Patricia C.; Griffith, O. Hayes  
CORPORATE SOURCE: Inst. Mol. Biol., Univ. Oregon, Eugene, OR, 97403, USA  
SOURCE: Biochemistry (1986), 25(1), 182-93  
CODEN: BICHAW; ISSN: 0006-2960  
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of amine-specific reagents based on the benzaldehyde reactive group have been synthesized, characterized, and used to study beef heart cytochrome c oxidase reconstituted in phospholipid bilayers. The series contained 3 classes of reagents, lipid-soluble phosphodiesters having a single hydrocarbon chain, phospholipid analogs, and a water-soluble benzaldehyde. All reagents were either radiolabeled or spin-labeled or both. The Schiff bases formed by these benzaldehydes with amines were reversible until the addition of the reducing agent Na cyanoborohydride, whereas attachment of lipid-derived aliphatic aldehydes was not readily reversible in the absence of the reducing agent. The benzaldehyde group provides a convenient method of controlling and delaying permanent attachment to integral **membrane** proteins until after the reconstitution steps. This ensures that the lipid analogs are located properly to identify amine groups at the lipid-protein interface rather than reacting indiscriminately with amines of the hydrophilic domains of the protein. The benzaldehyde lipid labels attached to cytochrome c oxidase with high efficiency. Typically, 20% of the amount of lipid label present was covalently attached to the protein, and the number of moles of label incorporated per mol of protein ranged 1-6, depending on the molar ratios of label, lipid, and protein. The efficiency of labeling by the water-soluble benzaldehyde was much less than that observed for any of the lipid

labels because of dilution effects, but equivalent levels of incorporation were achieved by increasing the label concentration ESR spectra of a nitroxide-containing

phospholipid analog covalently attached to reconstituted cytochrome c oxidase exhibited a large motion-restricted component, which is characteristic of spin-labeled lipids in contact with the hydrophobic surfaces of **membrane** proteins. The line shape and splittings were similar for covalently attached label and label free to diffuse and contact the protein mols. in the **bilayer**, providing independent evidence that the coupling occurs at the protein-lipid interface. The distribution of the benzaldehyde reagents attached to the polypeptide components of cytochrome c oxidase was examined by SDS polyacrylamide gel electrophoresis. The labeling pattern observed for the lipid analogs was not affected by the presence of the nitroxide moiety on the acyl chains but was dependent on the molar ratio of labeling reagent to protein. With the lipid labels, band VII was the most heavily labeled, and significant labeling of bands III, V, and VI was observed at higher labeling ratios. There was little or no labeling of bands I, II, and IV. A different labeling pattern was observed with the water-soluble label, providing addnl. evidence that the lipid-like benzaldehyde reagents react with cytochrome c oxidase from the confines of the **bilayer**. Thus, these new labels have the necessary specificity and reactivity to be useful in correlating sequence data with the structure and function of integral **membrane** proteins, particularly in identifying regions in contact with phospholipid head groups at the lamellar interface.

L15 ANSWER 36 OF 38 MEDLINE on STN DUPLICATE 10  
ACCESSION NUMBER: 82182979 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 6176271  
TITLE: A novel approach for the topographical localization of glycolipids on the cell surface.  
AUTHOR: Spiegel S; Skutelsky E; Bayer E A; Wilchek M  
CONTRACT NUMBER: F32-ES5120 (NIEHS)  
SOURCE: Biochimica et biophysica acta, (1982 Apr 23) 687 (1) 27-34.  
Journal code: 0217513. ISSN: 0006-3002.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals

ENTRY MONTH: 198207  
ENTRY DATE: Entered STN: 19900317  
Last Updated on STN: 19970203  
Entered Medline: 19820719

AB In this study we have developed a prototype system for distinguishing between the topographical distribution of glycolipids versus glycoproteins on the ultrastructural level. Direct modification of **membrane**-based sialic acids with biotin groups labels both glycolipids and glycoproteins. In this case, subsequent ultrastructural localization of biotinylated sites would not discern between these two classes of glycoconjugate in an unambiguous manner. When biotinylated cells are fixed prior to interaction with ferritin-conjugated avidin, the mean distance of marker molecules from the **membrane bilayer** is 8.0 nm. In contrast, if the cells are allowed to cap through the action of ferritin-avidin **conjugates** on unfixed cells, the average distance (13.0 nm) of the marker molecules appears even more distant from the **membrane** on the capped portion of the cell (uropod), whereas those on the **head** region are positioned in close proximity to the **bilayer** (3.7 nm). In order to exclusively label cell surface glycolipids on the ultrastructural level, bovine brain gangliosides were biotinylated in vitro and the haptenized gangliosides were incorporated into intact cells. In this case, marker molecules denoting the incorporated gangliosides were found in relatively close juxtaposition to the **membrane** surface, in a manner strikingly similar to the labeling pattern of the head region on capped cells. These results support the concept that, in the native state, the carbohydrate portion of glycolipids is positioned closer to the **membrane bilayer** than that of glycoproteins.

=> (cap or capping) and membrane and antibod?  
L16 2107 (CAP OR CAPPING) AND MEMBRANE AND ANTIBOD?

=> py>1999  
4 FILES SEARCHED...  
<-----User Break----->

SEARCH ENDED BY USER

=>

=>

=> py>1999 and 116  
L17 305 PY>1999 AND L16

=> 116 not 117  
L18 1802 L16 NOT L17

=> py>1998 and 118  
L19 63 PY>1998 AND L18

=> 118 not 119  
L20 1739 L18 NOT L19

=> t ti 120 1-50

L20 ANSWER 1 OF 1739 MEDLINE on STN  
TI Immunolocalization of integrin-like proteins in *Arabidopsis* and *Chara*.

L20 ANSWER 2 OF 1739 MEDLINE on STN  
TI Mechanotransduction molecules in the plant gravisensory response:

- amyloplast/statolith membranes contain a beta 1 integrin-like protein.
- L20 ANSWER 3 OF 1739 MEDLINE on STN  
TI Central root **cap** cells are depleted of endoplasmic microtubules and actin microfilament bundles: implications for their role as gravity-sensing statocytes.
- L20 ANSWER 4 OF 1739 MEDLINE on STN  
TI Microsomal **membrane** proteins and vanadate-sensitive ATPase from *Vicia faba* root tips after clinostat treatment.
- L20 ANSWER 5 OF 1739 MEDLINE on STN  
TI Purification and immunolocalization of an annexin-like protein in pea seedlings.
- L20 ANSWER 6 OF 1739 MEDLINE on STN  
TI Developmental regulation of lymphocyte-specific protein 1 (LSP1) expression in thymus during human T-cell maturation.
- L20 ANSWER 7 OF 1739 MEDLINE on STN  
TI Odontoblast differentiation: a response to environmental calcium?.
- L20 ANSWER 8 OF 1739 MEDLINE on STN  
TI Gamma-glutamyl transpeptidase, an ecto-enzyme regulator of intracellular redox potential, is a component of TM4 signal transduction complexes.
- L20 ANSWER 9 OF 1739 MEDLINE on STN  
TI An analysis of microvessel density, androgen receptor, p53 and HER-2/neu expression and Gleason score in prostate cancer . preliminary results and therapeutic implications.
- L20 ANSWER 10 OF 1739 MEDLINE on STN  
TI Human cementum tumor cells have different features from human osteoblastic cells in vitro.
- L20 ANSWER 11 OF 1739 MEDLINE on STN  
TI The effects of brefeldin A on acrosome formation and protein transport to the acrosome in organ cultures of rat seminiferous tubules.
- L20 ANSWER 12 OF 1739 MEDLINE on STN  
TI A novel dipstick developed for rapid Bet v 1-specific IgE detection: recombinant allergen immobilized via a monoclonal **antibody** to crystalline bacterial cell-surface layers.
- L20 ANSWER 13 OF 1739 MEDLINE on STN  
TI Adducin is an in vivo substrate for protein kinase C: phosphorylation in the MARCKS-related domain inhibits activity in promoting spectrin-actin complexes and occurs in many cells, including dendritic spines of neurons.
- L20 ANSWER 14 OF 1739 MEDLINE on STN  
TI Heterogeneity in the presence of CD4-like molecules on human spermatozoa.
- L20 ANSWER 15 OF 1739 MEDLINE on STN  
TI Virulence and functions of myosin II are inhibited by overexpression of light meromyosin in *Entamoeba histolytica*.
- L20 ANSWER 16 OF 1739 MEDLINE on STN  
TI Radiation-induced apoptosis in human lymphocytes and lymphoma cells critically relies on the up-regulation of CD95/Fas/APO-1 ligand.
- L20 ANSWER 17 OF 1739 MEDLINE on STN  
TI Peripheral blood lymphocytes from psoriatic patients are hyporesponsive to

- beta-streptococcal superantigens.
- L20 ANSWER 18 OF 1739 MEDLINE on STN  
TI An essential role for the interaction between hyaluronan and hyaluronan binding proteins during joint development.
- L20 ANSWER 19 OF 1739 MEDLINE on STN  
TI The olfactory adenylyl cyclase III is expressed in rat germ cells during spermiogenesis.
- L20 ANSWER 20 OF 1739 MEDLINE on STN  
TI Downregulation of the beta4 integrin subunit in prostatic carcinoma and prostatic intraepithelial neoplasia.
- L20 ANSWER 21 OF 1739 MEDLINE on STN  
TI Molecular cloning and characterization of P47, a novel boar sperm-associated zona pellucida-binding protein homologous to a family of mammalian secretory proteins.
- L20 ANSWER 22 OF 1739 MEDLINE on STN  
TI Association of an 80 kDa protein with C-CAM1 cytoplasmic domain correlates with C-CAM1-mediated growth inhibition.
- L20 ANSWER 23 OF 1739 MEDLINE on STN  
TI Colon carcinoma cells use different mechanisms to escape CD95-mediated apoptosis.
- L20 ANSWER 24 OF 1739 MEDLINE on STN  
TI A crossreactivity at the immunoglobulin E level of the cell wall mannoproteins of *Candida albicans* with other pathogenic *Candida* and airborne yeast species.
- L20 ANSWER 25 OF 1739 MEDLINE on STN  
TI Simultaneous quantitation of specific IgE against 20 purified allergens in allergic patients sera by checkerboard immunoblotting (CBIB).
- L20 ANSWER 26 OF 1739 MEDLINE on STN  
TI Binding of the soluble, truncated form of an Fc receptor (mouse Fc gamma RII) to **membrane**-bound IgG as measured by total internal reflection fluorescence microscopy.
- L20 ANSWER 27 OF 1739 MEDLINE on STN  
TI **Antibody**-induced and cytoskeleton-mediated redistribution and shedding of viral glycoproteins, expressed on pseudorabies virus-infected cells.
- L20 ANSWER 28 OF 1739 MEDLINE on STN  
TI Superantigenicity of helper T-cell mitogen (SPM-2) isolated from culture supernatants of *Streptococcus pyogenes*.
- L20 ANSWER 29 OF 1739 MEDLINE on STN  
TI Costimulatory molecules in human atherosclerotic plaques: an indication of antigen specific T lymphocyte activation.
- L20 ANSWER 30 OF 1739 MEDLINE on STN  
TI Epstein-Barr virus-encoded LMP-1 protein upregulates the pNDCF group of nucleoskeleton-cytoskeleton-associated proteins.
- L20 ANSWER 31 OF 1739 MEDLINE on STN  
TI Visualization of Golgi apparatus in methacrylate embedded conifer embryo tissue using the monoclonal **antibody** JIM 84.

- L20 ANSWER 32 OF 1739 MEDLINE on STN  
TI Leukosialin (CD43, sialophorin) redistribution in uropods of polarized neutrophils is induced by CD43 cross-linking by **antibodies**, by colchicine or by chemotactic peptides.
- L20 ANSWER 33 OF 1739 MEDLINE on STN  
TI Localization of nerve cells in the developing rat tooth.
- L20 ANSWER 34 OF 1739 MEDLINE on STN  
TI Immunohistochemical localization of nerve fibres during development of embryonic rat molar using peripherin and protein gene product 9.5 **antibodies**.
- L20 ANSWER 35 OF 1739 MEDLINE on STN  
TI The antigen receptor complex on cord B lymphocytes.
- L20 ANSWER 36 OF 1739 MEDLINE on STN  
TI Identification of two regions in the N-terminal domain of ActA involved in the actin comet tail formation by Listeria monocytogenes.
- L20 ANSWER 37 OF 1739 MEDLINE on STN  
TI Nitric oxide inhibits **capping** in HL-60 cells.
- L20 ANSWER 38 OF 1739 MEDLINE on STN  
TI Fibrin(ogen) and von Willebrand factor deposition are associated with intimal thickening after balloon angioplasty of the rabbit carotid artery.
- L20 ANSWER 39 OF 1739 MEDLINE on STN  
TI Markers of bone and cementum formation accumulate in tissues regenerated in periodontal defects treated with expanded polytetrafluoroethylene membranes.
- L20 ANSWER 40 OF 1739 MEDLINE on STN  
TI Local accumulation of alpha-spectrin-related protein under plasma **membrane** during **capping** and phagocytosis in Acanthamoeba.
- L20 ANSWER 41 OF 1739 MEDLINE on STN  
TI Effects of Ajoene on lymphocyte and macrophage **membrane**-dependent functions.
- L20 ANSWER 42 OF 1739 MEDLINE on STN  
TI An Aplysia cell adhesion molecule associated with site-directed actin filament assembly in neuronal growth cones.
- L20 ANSWER 43 OF 1739 MEDLINE on STN  
TI Analysis of yeast trimethylguanosine-capped RNAs by midwestern blotting.
- L20 ANSWER 44 OF 1739 MEDLINE on STN  
TI Cell adhesion molecules NgCAM and axonin-1 form heterodimers in the neuronal **membrane** and cooperate in neurite outgrowth promotion.
- L20 ANSWER 45 OF 1739 MEDLINE on STN  
TI CD66: role in the regulation of neutrophil effector function.
- L20 ANSWER 46 OF 1739 MEDLINE on STN  
TI Presence of the elastin-laminin receptor on human activated lymphocytes.
- L20 ANSWER 47 OF 1739 MEDLINE on STN  
TI ANCA defines the clinical disease manifestations of vasculitis.
- L20 ANSWER 48 OF 1739 MEDLINE on STN

TI Association of murine splenocyte CD3 complex to the cytoskeleton: absence of modulation by exogenous fatty acids.

L20 ANSWER 49 OF 1739 MEDLINE on STN

TI Association of the tetraspan protein CD9 with integrins on the surface of S-16 Schwann cells.

L20 ANSWER 50 OF 1739 MEDLINE on STN

TI Evidence for the presence of immunoglobulin E **antibodies** specific to the cell wall phosphomannoproteins of *Candida albicans* in patients with allergies.

=> d ibib abs 120 27,32,44,50

L20 ANSWER 27 OF 1739 MEDLINE on STN

ACCESSION NUMBER: 1998001342 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9343177

TITLE: **Antibody**-induced and cytoskeleton-mediated redistribution and shedding of viral glycoproteins, expressed on pseudorabies virus-infected cells.

AUTHOR: Favoreel H W; Nauwynck H J; Van Oostveldt P; Mettenleiter T C; Pensaert M B

CORPORATE SOURCE: Laboratory of Virology, Faculty of Veterinary Medicine, University of Ghent, Belgium.

SOURCE: Journal of virology, (1997 Nov) 71 (11) 8254-61.  
Journal code: 0113724. ISSN: 0022-538X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199711

ENTRY DATE: Entered STN: 19971224  
Last Updated on STN: 19971224  
Entered Medline: 19971113

AB Fluorescein isothiocyanate-labeled porcine pseudorabies virus (PrV) polyclonal **antibodies** were added to PrV-infected swine kidney cells in vitro at 37 degrees C. In approximately 47% of the infected cells, the addition induced passive patching and subsequent energy- and microtubule-dependent **capping** of all viral envelope glycoproteins, expressed on the plasma membranes of the infected cells. Further contraction and extrusion of the capped viral glycoproteins occurred in approximately 30% of the capped cells 2 h after the addition of **antibodies** and was accompanied by a concentration of F-actin beneath the caps. At that time, about 18% of the extruded caps were shed spontaneously into the surrounding medium. Mechanical force released 85% of the extruded caps, leaving viable cells with no microscopically detectable levels of viral glycoproteins on their plasma membranes. Experiments with PrV deletion mutants showed that viral glycoproteins gE and gI are important in triggering viral glycoprotein redistribution. Since the PrV gE-gI complex exhibits Fc receptor activity which facilitates **capping**, the importance of gE and gI may be partially explained by **antibody** bipolar bridging.

L20 ANSWER 32 OF 1739 MEDLINE on STN

ACCESSION NUMBER: 97367997 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9224764

TITLE: Leukosialin (CD43, sialophorin) redistribution in uropods of polarized neutrophils is induced by CD43 cross-linking by **antibodies**, by colchicine or by chemotactic peptides.

AUTHOR: Seveau S; Lopez S; Lesavre P; Guichard J; Cramer E M;

CORPORATE SOURCE: Halbwachs-Mecarelli L  
INSERM U90 Hopital Necker, Paris, France.  
SOURCE: Journal of cell science, (1997 Jul) 110 ( Pt 13) 1465-75.  
Journal code: 0052457. ISSN: 0021-9533.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199709  
ENTRY DATE: Entered STN: 19971008  
Last Updated on STN: 19971008  
Entered Medline: 19970922

AB We investigated a possible association of leukosialin (CD43), the major surface sialoglycoprotein of leukocytes, with neutrophil cytoskeleton. We first analysed the solubility of CD43 in Triton X-100 and observed that CD43 of resting neutrophils was mostly soluble. The small proportion of CD43 molecules, which 'spontaneously' precipitated in Triton, appeared associated with F-actin, as demonstrated by the fact that this insolubility did not occur when cells were incubated with cytochalasin B or when F-actin was depolymerized with DNase I in the Triton precipitate. Cell stimulation with anti-CD43 mAb (MEM59) enhanced this CD43-cytoskeleton association. By immunofluorescence as well as by electron microscopy, we observed a redistribution of CD43 on the neutrophil **membrane**, initially in patches followed by caps, during anti-CD43 cross-linking at 37 degrees C. This **capping** did not occur at 4 degrees C and was inhibited by cytochalasin B and by a myosin disrupting drug butanedione monoxime, thus providing evidence that the actomyosin contracile system is involved in the **capping** and further suggesting an association of CD43 with the cytoskeleton. Some of the capped cells exhibited a front-tail polarization with CD43 caps located in the uropod at the rear of the cell. Surprisingly, colchicine and the chemotactic factor fNLPNTL which induce neutrophil polarization associated with cell motility, also resulted in a clustering of CD43 in the uropod, independently of a cross-linking of the molecule by mAbs. An intracellular redistribution of F-actin, mainly at the leading front and of myosin in the tail, was observed during CD43 clustering induced by colchicine and in cells polarized by anti-CD43 mAbs cross-linking. We conclude that neutrophil CD43 interacts with the cytoskeleton, either directly or indirectly, to redistribute in the cell uropod under **antibodies** stimulation or during cell polarization by colchicine, thus highly suggesting that CD43 may be involved in cell polarization.

L20 ANSWER 44 OF 1739 MEDLINE on STN  
ACCESSION NUMBER: 97133428 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8978825  
TITLE: Cell adhesion molecules NgCAM and axonin-1 form heterodimers in the neuronal **membrane** and cooperate in neurite outgrowth promotion.  
AUTHOR: Buchstaller A; Kunz S; Berger P; Kunz B; Ziegler U; Rader C; Sonderegger P  
CORPORATE SOURCE: Institute of Biochemistry, University of Zurich, Switzerland.  
SOURCE: Journal of cell biology, (1996 Dec) 135 (6 Pt 1) 1593-607.  
Journal code: 0375356. ISSN: 0021-9525.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-Z75013  
ENTRY MONTH: 199701  
ENTRY DATE: Entered STN: 19970219  
Last Updated on STN: 19970219

Entered Medline: 19970117

AB The axonal surface glycoproteins neuronglia cell adhesion molecule (NgCAM) and axonin-1 promote cell-cell adhesion, neurite outgrowth and fasciculation, and are involved in growth cone guidance. A direct binding between NgCAM and axonin-1 has been demonstrated using isolated molecules conjugated to the surface of fluorescent microspheres. By expressing NgCAM and axonin-1 in myeloma cells and performing cell aggregation assays, we found that NgCAM and axonin-1 cannot bind when present on the surface of different cells. In contrast, the cocapping of axonin-1 upon **antibody-induced capping** of NgCAM on the surface of CV-1 cells coexpressing NgCAM and axonin-1 and the selective chemical cross-linking of the two molecules in low density cultures of dorsal root ganglia neurons indicated a specific and direct binding of axonin-1 and Ng-CAM in the plane of the same **membrane**. Suppression of the axonin-1 translation by antisense oligonucleotides prevented neurite outgrowth in dissociated dorsal root ganglia neurons cultured on an NgCAM substratum, indicating that neurite outgrowth on NgCAM substratum requires axonin-1. Based on these and previous results, which implicated NgCAM as the neuronal receptor involved in neurite outgrowth on NgCAM substratum, we concluded that neurite outgrowth on an NgCAM substratum depends on two essential interactions of growth cone NgCAM: a trans-interaction with substratum NgCAM and a cis-interaction with axonin-1 residing in the same growth cone **membrane**.

L20 ANSWER 50 OF 1739 MEDLINE on STN

ACCESSION NUMBER: 97071908 MEDLINE

DOCUMENT NUMBER: PubMed ID: 8914753

TITLE: Evidence for the presence of immunoglobulin E **antibodies** specific to the cell wall phosphomannoproteins of *Candida albicans* in patients with allergies.

AUTHOR: Kanbe T; Morishita M; Ito K; Tomita K; Utsunomiya K; Ishiguro A

CORPORATE SOURCE: Laboratory of Medical Mycology, Nagoya University School of Medicine, Japan.. tkanbe@tsuru.med.nagoya.u.ac.jp

SOURCE: Clinical and diagnostic laboratory immunology, (1996 Nov) 3 (6) 645-50.

Journal code: 9421292. ISSN: 1071-412X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199702

ENTRY DATE: Entered STN: 19970305

Last Updated on STN: 19970305

Entered Medline: 19970218

AB To determine the major antigenic component of *Candida albicans* against immunoglobulin E (IgE) **antibodies** in the sera of patients with allergies who were positive for IgE **antibodies** to *C. albicans* crude antigen in a CAP system, phosphomannoproteins (CAMP/A or CAMP/B for serotype A or B strain, respectively) and their acid-stable portions (CAMP-S/A or CAMP-S/B) were isolated from beta-mercaptoethanol (2-ME) extracts of *C. albicans* cells of serotypes A and B, and IgE **antibodies** against these components were compared with those against protein complex and enolase (CAE) fractions isolated from *C. albicans* cells. The dot blot test, which was used to detect IgE **antibodies** to the *C. albicans* antigens, showed that IgE **antibodies** to the 2-ME extract and phosphomannoprotein fractions were present in the sera of 98.0% (2-ME extract), 96.8% (CAMP/A), 93.2% (CAMP-S/A), 97.2% (CAMP/B), and 81.5% (CAMP-S/B) of the patients, whereas IgE **antibodies** to the protein complex and CAE fractions were found in the sera of 73.6 and 48.8% of the patients, respectively. The

extent of IgE binding to the 2-ME extract and phosphomannoproteins was well correlated with the fluorescence intensities estimated with the CAP system. Furthermore, the results obtained from the inhibition experiment with the CAP system indicated that the binding of IgE **antibodies** to Candida antigens is strongly inhibited by the phosphomannoprotein fraction and is an indication that the serum of the patients contained IgE **antibodies** specific to the cell wall phosphomannoproteins of C. albicans. Finally, an initial chemical analysis indicated that the epitopes for IgE **antibodies** on the phosphomannoproteins is a carbohydrate portion, since the ability of CAMP/A to inhibit the binding of IgE **antibodies** to the homologous CAMP/A was destroyed after oxidation by sodium periodate but not after digestion with proteinase K.

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

FULL ESTIMATED COST

210.64

SESSION

365.37

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

CA SUBSCRIBER PRICE

-5.84

SESSION

-5.84

FILE 'STNGUIDE' ENTERED AT 16:56:56 ON 22 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> logoff y

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

FULL ESTIMATED COST

0.06

SESSION

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

CA SUBSCRIBER PRICE

0.00

SESSION

-5.84

STN INTERNATIONAL LOGOFF AT 16:57:32 ON 22 JUL 2005